

Motivations of pre-service teachers in physical education to incorporate outdoor  
education in k-12 physical education school programs

THESIS

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## **ABSTRACT**

There is strong national endorsement for including outdoor adventure and challenge activities in the physical education classroom yet, for whatever reasons, PE practitioners still cling to the traditional sport oriented method of physical education. Still, sports and games remain in the realm of PE and outdoor skills activities remain in the realm of OE. This behavior implies a misperception of where and how to incorporate outdoor education focused physical skills lessons.

This study describes how current PE and OE pre-service teachers perceive the PE/OE pre-service landscape, and the motivations leading them to choose one program major over the other. Students who are currently enrolled in degree required courses in either PE or OE teacher preparation programs at the University of Minnesota Duluth, University of Wisconsin Lacrosse and the University of Wisconsin Steven's Point were surveyed. The findings of this study reveals that there are college student who have an interest in providing outdoor education, but are not particularly interested in teaching it to kids in the formal school setting. And that there are college student who are interested in teaching kids in a formal school setting, but are not be particularly interested in providing outdoor education.

Developing students who have both an interest in outdoor education and an interest in teaching in the formal setting is just one important step. Equally important is that all parties invested in the health and well being of our children create an environment within our physical education system that is excepting of outdoor education principles and supportive of its advocates

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## **CHAPTER 1**

### **INTRODUCTION**

#### **Background and Setting**

Children's disconnect from nature in their everyday lives has increased in recent years (Charles, 2009, p. 468). Some reasons for this disconnect may include decreased access to natural areas, time playing video games and watching television, scheduled indoor activity, and parental fears that their children may be harmed (Paloni, 2007). Consider this from a Colorado Legislative Report: Children spend half as much time outside as they did 20 years ago while childhood obesity has more than doubled and adolescent obesity has tripled. This relationship is probably not coincidental since kids are more likely to be physically active when they are outdoors. A survey conducted by Colorado State University revealed that 99% of parents in Denver and Ft. Collins strongly agreed their child would rather play with technological devices than spend time in nature. The average age of outdoor enthusiasts in the U.S. is 55,4 which illustrates the lack of youngsters on the trails and in the woods. Youth spend over forty hours a week watching television, playing video games, or connected to other electronic devices, the equivalent of a full-time job. This sedentary lifestyle is a major factor in the prevalence of childhood obesity in the U.S., which accounts for \$100 billion annually in healthcare expenses.<sup>6</sup> (Colorado State Legislature, 2010, p. I)

Increasing access to outdoor recreational activities can be positive on many levels. Most importantly are increased environmental awareness and increased physical activity.

Infusing outdoor activities into the physical education (PE) curriculum addresses both of these needs. Simply mandating for outdoor activities does not ensure that it will be implemented though. Many physical education teachers have become disenchanted with traditional sports and recreation activities. They seek alternative lifetime activities that provide a physical and mental challenge, confidence building, teamwork, and even a degree of risk, or an element of danger (Luo et al., 2002). Unfortunately, the PE curriculum has long been one of team sports and other organized game play (“NASPE Guidelines,” 2009). In fact, unstructured playtime and outdoor recreation have decreased, (while) involvement in organized sports like soccer, football, and softball have increased (Colorado State Legislature, 2010, p. 12). PE practitioners must be willing to, capable of, and allowed to deliver outdoor activities. It seems that many are not inclined to. From personal experience in both science and physical education, outdoor activities seem to spring from science related areas. Sometimes the activities are built into an environmental education (EE) curriculum if a leader has background and/or interest in outdoor activities. For example, at one school in northern Minnesota, the skis and snowshoes were kept in the worm-composting shed. Sports and games had been in the realm of PE and nature activities were in the realm of EE. This behavior implies a misperception of where and how to incorporate outdoor education focused physical skills lessons.

At least two national educational institutions advocate providing outdoor education through the physical education curriculum. The National Council for Accreditation of Teacher Education (NCATE), a national accreditation body, has clearly stated that outdoor education competency in physical education teacher education undergraduate

programs have to be met in order to be accredited, and yet a 2002 study found that only 46 of 162 United States PE pre-service programs surveyed reported being in compliance (Luo et al., 2002). Additionally, the National Association for Sports and Physical Education (NASPE) states that students should have opportunities to develop participatory skills in adventure and other challenge activities such as camping, hiking, backpacking, skiing, and skating (Luo et al., 2002).

### **Summary**

Throughout history, k-12 physical education has had to adapt to change, more so probably than any other academic area. Clearly, throughout the history of American education, outdoor education has been invited, if not authorized, into the physical education classroom. Still, the k-12 PE curriculum is dominated by team sports and athletic activities. This is not to say that team sports and athletics have no place in the curriculum. Many children benefit from participating in these activities while in school, and some benefit from continued participation in organized team sports into adulthood. But in reality, team games tend to be less popular among the adult population (Fairclough, Stratton, & Baldwin, 2002, p. 70).

Given such strong national endorsement, why then, are PE practitioners not delivering more outdoor education? Current PE teachers and PE teacher-educators seem a logical place to start. "Many experts agree that the education establishment has been unbelievably slow in responding to change. Nowhere does the literature suggest that teacher education plays a leading roll in affecting change" (Grebner et al., 1982). There are many factors that prevent change, including: the tendency in human nature to resist change; interest in recapturing past success; preoccupation with what is rather than what



ought to be; dependence on traditional teaching styles; the tendency to dwell on bad rather than good teaching; obstacles within institutions, e.g., financial constraints, faculty provincialism, bureaucratic structures; the gap between academia and the real world; the lack of educators prepared as change agents, trend catalysts, researchers, or futureists (Grebner et al., 1982).

Assuming that physical educators were allowed to include outdoor education in their classrooms where it previously had not existed, they would require both the knowledge to comfortably deliver the activities, and the desire to do so. Unfortunately, many PE practitioners leave their institutions unprepared for either. One factor for this may be that suitable candidates are more interested in typical adventure education careers offered through employment at places such as Outward Bound and college outdoor programs. Another factor may be that current pre-service faculty do not value incorporating OE in the PE curriculum. The current structure of PE teacher preparation programs must change in order to put the right people with the right knowledge into places to affect change.

**Problem Statement**

The barriers preventing pre-service students from utilizing outdoor education in the physical education setting are unknown.

**Objectives**

1. Describe the value of outdoor education in k-12 physical education curricula.
2. Describe what standards exist for outdoor education to be incorporated into k-12 physical education programs.

**Research Questions**

1. What factors influence an undergrads choice to pursue a career in adventure education vs. traditional physical education?
2. To what extent do pre-service students value O.E. as part of the P.E. curriculum?
3. To what extent do pre-service education faculty value O.E. in the P.E. curriculum?

**Definitions of Terms**

Physical education: The mission of middle school physical education, or physical education at any level, is to assist learners to become physically educated persons (National Association for Sport and Physical Education [NASPE], 1995). In order to accomplish this lofty goal physical education teachers should design and implement their programs in light of the six NASPE content standards (NASPE, 2004) (Mohr, Townsend, & Pritchard, 2006). Central to this over-arching mission is the physical educator's responsibility to provide children with developmentally appropriate opportunities that foster the knowledge, skills, and dispositions necessary for engaging in regular physical activity (Darst, 2001).

Nonformal Education: Nonformal education proceeds in a planned but highly adaptable way in institutions, organizations, and situations outside the sphere of formal schooling (Tamir, n.d.).

Lifetime leisure activities: Lifetime leisure activity can be thought of as lifelong, individualized, and health-related (AAHPERD, 2005). Therefore, a lifetime leisure activity is any activity that can be done on a regular basis throughout the lifespan, that a person voluntarily engages in, and that has the potential to maintain or improve an individual's health- and/or skill-related fitness (Mohr et al., 2006).

Outdoor education: an experiential method of learning by doing, which takes place primarily through exposure to the out-of-doors. In outdoor education, the emphasis for the subject of learning is placed on RELATIONSHIPS: relationships concerning human and natural resources (Priest, 1986).

Outdoor recreation: A broad spectrum of outdoor activities participated in during leisure time purely for pleasure or some other intrinsic value. Included are hiking, swimming, boating, winter sports, cycling, and camping.

Outdoor pursuits: Generally non-mechanical outdoor recreation activities done in areas remote from the amenities of a telephone, emergency help and urban comforts

Adventure education: Activities into which are purposely built elements that participants view as being perceived risk. The activities are not inherently dangerous as taught, but appear to be to the participant and thus they generate a sense of “adventure.” Adventure activities include such things as rope courses, whitewater rafting, mountaineering, and rock climbing (under qualified instruction) (Ford, 1986).

Pre-service teacher education: The education and training provided to student teachers before they have undertaken any teaching.

**Basic Assumptions**

1. The PE setting is appropriate for the delivery of outdoor education.
2. Professional organizations support and recommend that outdoor education be provided in the k-12 PE setting.

**Significance**

1. Understanding how pre-service teachers view the relationship between PE and OE in the k-12 school setting and how this relationship matches their own career aspirations gives PE and OE pre-service programs insight into recruitment and curriculum development.
2. A broader definition of PE that is more inclusive of OE practices and principles and thus more attractive to OE pre-service teachers can be written, thus providing more access through training, whether it be in-service or pre-service.

## **Chapter 2**

### **LITERATURE REVIEW**

#### **Introduction**

The two main resources used in this review to support the connection between Outdoor Education and physical and mental health; Lt. Governor Barbara O'Brien's "Colorado Kids Outdoors Initiative" and the "White Paper of the Association of Fish & Wildlife Agencies' North American Conservation Education Strategy" are just a small sample of reports created by regional and statewide efforts to connect youth with the outdoors. Many of these reports site the same sources in their effort to bolster support for their initiatives. It is evident from the length and breath of these sited works, that the link between Outdoor Education and increased physical and mental wellness is well founded.

#### **The Benefits of Getting Outside**

According to the Centers for Disease Control and Prevention, when children and adolescents participate in the recommended level of physical activity, at least 60 minutes daily, multiple health benefits accrue. Student physical activity may help improve academic performance including academic achievement (e.g., grades, standardized test scores); academic behavior (e.g., on-task behavior, attendance); and factors that can positively influence academic achievement (e.g. concentration, attention, improved classroom behavior) ("BenefitsofOutdoorSkills\_WhitePaper\_11-2010\_Final with cover-1.pdf," 2010, p. vi).

The Council of Outdoor Educators of Ontario found that Outdoor Education (OE) provides powerful opportunities for extensive personal and interpersonal growth, particularly when trained outdoor educators are involved in all aspects of the program (“BenefitsofOutdoorSkills\_WhitePaper\_11-2010\_Final with cover-1.pdf,” 2010, p. v).

A nation wide study in 2008 by the National Recreation and Park Association (NRPA) found that studies imply that use and exposure to the outdoors and park-like settings through outdoor activities can improve moods, perceived wellness, and increase longevity. More specifically, access and use of local park and recreation opportunities (e.g., running, cycling, fitness programs) is associated with increased physical activity and such activities are associated with improved health aspects such as lower blood pressure and perceived physiological - psychological health (“BenefitsofOutdoorSkills\_WhitePaper\_11-2010\_Final with cover-1.pdf,” 2010, p. v).

Outdoor pursuits do more than combat obesity and benefit the economy; spending time outside benefits overall wellness and academic achievement. Playing outside improves concentration, motor development, coordination, mental acuity, and mood. Time outdoors also reduces attention deficit disorder (ADD) symptoms, lowers blood pressure, and alleviates stress and anxiety (“BenefitsofOutdoorSkills\_WhitePaper\_11-2010\_Final with cover-1.pdf,” 2010, p. v)

Spending time in the open air and learning outside increases students’ ability to think creatively and improves problem-solving skills. Students who play and learn in outdoor settings perform better on tests, have higher grade point averages (GPAs), and cause fewer classroom disruptions (Colorado State Legislature, 2010, p. II).

**Engagement in life long activities is important to overall health**

The Leisure Trends index implies that people who participate in outdoor activities tend to be happier than those who do not (see <http://www.leisuretrends.com/>). And, implications are that active living may lead to a healthier lifestyle (“BenefitsofOutdoorSkills\_WhitePaper\_11-2010\_Final with cover-1.pdf,” 2010, p. vii).

According to the Report of the Outdoor Resources Review Group, July 2009, the link between lack of physical activity and obesity has now been documented and provides a compelling case, during the ongoing national debate on health care reform, for promoting greater outdoor activity as a cost-effective, preventive approach to better health (“BenefitsofOutdoorSkills\_WhitePaper\_11-2010\_Final with cover-1.pdf,” 2010, p. vii)

**Outdoor Education participation leads to lifelong activity**

According to Centers for Disease Control and Prevention, Children who are more active outdoors and hang out outdoors tend to engage in greater physical activity as youth and later as adults (“BenefitsofOutdoorSkills\_WhitePaper\_11-2010\_Final with cover-1.pdf,” 2010, p. vi).

University of Colorado at Denver and Health Sciences Center found that If children grow up interacting with nature, they are more likely to develop a conservation ethic, volunteer, recycle, participate in outdoor recreation as an adult, and work in natural resources-related professions (“BenefitsofOutdoorSkills\_WhitePaper\_11-2010\_Final with cover-1.pdf,” 2010, p. vii).

According to the Outdoor Recreation Participation Top Line Report 2010, there is clear evidence that those who are active in their school years are more active as adults as

well as in high calorie burning activities (“BenefitsofOutdoorSkills\_WhitePaper\_11-2010\_Final with cover-1.pdf,” 2010, p. vii).

Whether kids are getting dirty in mucky ponds, biking to school, or skipping stones on a stream, spending time outdoors off the field is important, too. Youth who engage in these experiences are more likely to participate in “traditional” outdoor activities like camping, hiking, and fishing as adults (Colorado State Legislature, 2010, p. 12).

The most effective outdoor skill programs tend to be in structured programs: that are of longer duration; that are culturally appropriate; and where the effects appear to increase further over time (“BenefitsofOutdoorSkills\_WhitePaper\_11-2010\_Final with cover-1.pdf,” 2010, p. ix)

### **History Of Physical Education and Outdoor Education in the United States**

The histories of both physical education and outdoor education in the United States begin at about the same time, the late 1800s. School districts, especially larger ones such as Kansas City and Boston, began including physical education courses in their curricula (Grebner, Henderson, Keough, & Mancuso, 1982). Concurrently, school camps such as Milford-on-the-Sound, founded by Fredrick William Gunn, and the Round Hill School which sponsored outdoor education, camping and hiking, geologic expeditions and fishing began to establish themselves at private secondary institutions in the eastern United States (Wikipedia, 2010a). Where as physical education found its way into the public school curricula quite readily, outdoor education had struggled and struggles to this day finding a foot-hold, especially in the area of human movement.

The physical educators of the day banded early. In 1885, William Anderson, MD. Called together interested “gymnasium teachers and directors of gymnasia” to formulate



the Association for the Advancement of Physical Education (Grebner et al., 1982, p. 5). It was not until sixty-six years later that a similar outdoor education organization was founded by L.B. Sharp (D. Hammerman R, W. Hammerman M, & E. Hammerman L, 2001). Though their beginnings share a common starting point in time, their later stages only meet at a few specific and potentially important historical periods. Throughout the history of American education, specific and potentially important periods of change occurred that could have opened public school doors to outdoor education.

The first of these periods occurred early on. In the 1890s, John Dewey stressed the value of play, and the, “learn by doing concept”. From this, the philosophy of dualism emerged- simultaneously education the mind and training the body (Grebner et al., 1982, p. 2). Dewey was the most famous early proponent of hands-on learning or experiential education (Wikipedia, 2010b). In the early 1900s, Dewey advocated that educators should know how to capitalize on the child’s surroundings – physical, natural, social- in a manner that would result in significant learning experiences (D. Hammerman R et al., 2001). Somehow this did not translate to the physical education curricula. Maybe, because at the time, physical education practitioners were trained in the field of medicine. They may not have been prepared to use the natural environment. The first teacher preparation school in the U.S. offered instruction in anatomy, physiology, hygiene and apparatus free gymnastics (Grebner et al., 1982). Public schools across the US including Dubuque Public Schools, Chicago Public Schools and Los Angeles City Schools were beginning to offer camps (D. Hammerman R et al., 2001).

In 1911, the University of Wisconsin offered the first bachelor’s degree in physical education based on four years of study, and physical educators begin to take the place of

physicians as directors of professional programs, but the tradition of physicians as directors continued until 1926 (Grebner et al., 1982). Furthermore, these teacher preparation programs emphasized team sports and athletics, reflecting public school curriculum (Grebner et al., 1982). In the late 1920s, though, there was discussion concerning the problem of the “coach versus the physical educator” (Grebner et al., 1982). Physical education began to split into special interest areas- health, safety, recreation, dance, and fitness, prompting the Association for the Advancement of Physical Education to add Health in 1937 and then Recreation in 1938 to its title (Grebner et al., 1982). Consequently, physical education teacher preparation programs began offering specialty courses such as that at State Teachers College in Cortland, New York, where women registered for an outdoor leadership-training course along with students at nearby Syracuse University (D. Hammerman R et al., 2001).

In the early 1940s, the Highland Public Schools Of Washington, and the W.K. Kellogg Foundation, Battle Creek, Michigan supported a camping program for fifth and sixth graders with an emphasis on recreation and leisure pursuits (D. Hammerman R et al., 2001). L.B. Sharp, Director of National Camps and Life Camps, stated in 1947 in an article directed to secondary-school principals, “That which ought and can best be taught inside the classrooms should there be taught, and that which can best be learned through experience dealing directly with native materials and life situations outside the school should there be learned” (Sharp, 1947). Later on, in 1951, Sharp founded the Outdoor Education Association (D. Hammerman R et al., 2001).

During the 1950s, the doors to public school physical education curriculum were held wide open for outdoor education. In 1954, AAHPER appointed a task force to formulate,

judge and approve a set of standards for public school camping (D. Hammerman R et al., 2001). Then in 1958, AAHPER sponsored the First National Conference on Outdoor Education in Washington, D.C.. The final sessions were devoted to two fundamental issues in outdoor education: (a) teacher and leadership preparation for outdoor education, and (b) school programs in camp settings (D. Hammerman R et al., 2001). And in 1962, the main theme at the Second National Conference on Outdoor Education centered around the general relationship of outdoor education and fitness and leisure (D. Hammerman R et al., 2001). Coincidentally, the first Outward Bound School in Colorado was established in 1962.

In 1955, emphasis was placed on fitness due to President Dwight D. Eisenhower's Council on Youth Fitness, but only two years later, as reaction to Sputnik pushed education toward the sciences, physical education programs fell into jeopardy. Again, the mind-body dualism was argued (Grebner et al., 1982).

Beginning in the late 1960s, physical education teacher preparation programs emphasized general education, specifically for elementary schools, and focus shifted from teacher behavior to learner behavior (Grebner et al., 1982). At that time, the profession was concerned whether a range of competencies, such as individual, dual, and team sport skills, rhythm and dance skills, and aquatics should be required of all physical education majors preparing to teach, or if students should specialize in an area (Grebner et al., 1982). Furthermore, it was stated that, "to be contemporary, it is necessary for today's teacher to learn continuously and be able to teach new activities that have become popular as leisure pursuits (Grebner et al., 1982). In 1965, AAHPER organized the Council on Camping and Outdoor Education (D. Hammerman R et al., 2001).

Concurrently, the Elementary and Secondary Education Act was passed, and Title III funding provided more than \$5 million for outdoor education projects (D. Hammerman R et al., 2001).

Toward the end of the 1960s, government organizations such as the National Park Service and the U.S. Forest Service began to develop experiential based programs that would increase environmental awareness among Americans. This was followed in 1970 with the first Earth Day, the first report of the Council on Environmental Quality and the passage of the National Environmental Education Act (D. Hammerman R et al., 2001). A change in terminology from outdoor education to environmental education led to a broader consideration of man's total environment, including population, pollution, transportation, etc (D. Hammerman R et al., 2001). In 1977, the Association of Experiential Education was established (D. Hammerman R et al., 2001).

Title IX of the Education Amendments of 1972, which prohibits discrimination by sex in education programs that receive federal monies, along with Public Law 94-142, The Education for All Handicapped Children Act, which requires the inclusion of physical education in handicapped children's curricula, "changed or abolished traditions that had stood for decades." "Teacher education began to stress individual differences, instructional techniques that promote self-directed learning, and the spirit of global community" (Grebner et al., 1982). Following suit, physical education teacher preparation programs began to stress lifelong activities (Grebner et al., 1982). In 1976, Project REACH improved and expanded the quality and quantity of camping services for the Handicapped.

In 1971, Jerry Pieh, the son of Bob Pieh who had founded the Minnesota Outward Bound School, started Project Adventure. Project Adventure received federal funding to develop programming aimed at adventure-based learning in schools. In 1977 Paul Petzoldt the founder of the National Outdoor Leadership School (NOLS) created the Wilderness Educators Association. Petzoldt aimed to bring the training of outdoor leadership into colleges and develop an extensive leader-training curriculum (Neill, 2005)

In the mid 1970s, the association providing leadership for physical education teacher preparation programs, the National Association of Sport and Physical Education (NASPE) was founded. The issue of “education of the physical verse education through the physical” was revived (Grebner et al., 1982). The Association for the Advancement of Physical Education, Health, and Recreation added Dance to its title in 1979 (Grebner et al., 1982). In the early 1990s NASPE included adventure education in its benchmarks and content standards for school physical education (Zmudy, Curtner-Smith, & Steffen, n.d.).

In 2001 the No Child Left Behind Act was passed, making schools accountable for educational standards. One implication was that instructional time was maximized while noninstructional time, such as recess, was minimized (Pellegrini & Bohn, 2005). Richard Louv, Author of “Last Child in the Woods” coined the term “nature-deficit disorder” in 2005 (Charles, 2009). Concerned citizens began to demand that state boards of education address this issue. In 2007, bills entitled the No Child Left Inside Act were introduced in the House (H.R.3036) and the Senate (S.1981) (NAAEE, 2010). In the words of Cheryl Charles, Co-founder of the Children & Nature Network, “The movement to reconnect children and nature is burgeoning worldwide” (Charles, 2009).

**Existing standards for incorporating outdoor education into the k-12 physical education curriculum**

Many physical education teachers have become disenchanted with traditional sports and recreation activities. They seek alternative lifetime activities that provide a physical and mental challenge, confidence building, teamwork, and even a degree of risk, or an element of danger (Luo et al., 2002). Unfortunately, the PE curriculum has long been one of team sports and other organized game play (“NASPE Guidelines,” 2009). Based primarily on subject matter perspective and disciplinary mastery, exclusive employment of the sport education, fitness education, or movement analysis models do little to develop the whole person or encourage young people to develop a lifelong commitment to active healthy living (Trilling, 2006). A well rounded middle school physical education curriculum includes lifetime leisure activities and skill based team-oriented sport activities, in addition to any other activities that are important to a particular school and the community in which it is situated (Mohr et al., 2006)

A look into the various standards that have been put into place to ensure that children have access to outdoor education in their PE classrooms can be confusing. The National Council for Accreditation of Teacher Education (NCATE), a national accreditation body, has clearly stated that outdoor education competency in physical education teacher education undergraduate programs have to be met in order to be accredited, and yet a 2002 study found that only 46 of 162 United States PE pre-service programs surveyed reported being in compliance (Luo et al., 2002). NCATE agrees with what the Minnesota Board of Teaching uses in approving the Physical Education Teacher Preparation Programs at Minnesota state universities. Their document, the “Professional Education Program Evaluation Report (PEPER II) and Request for Continuing Program Approval”,

has very little in it directly related to outdoor education (*PEPER II Physical Education*, 2009). Additionally, according to (Luo et al., 2002), the National Association for Sports and Physical Education (NASPE) stated that students should have opportunities to develop participatory skills in adventure and other challenge activities such as camping, hiking, backpacking, skiing, and skating. But I found very little in the NASPE literature, including the publications “National Standards for Physical Education” (“NASPE National PE Standards,” 2004) and “National Standards and Guidelines For Physical Education Teacher Education” (Uhrich, Chepko, & Courturier, 2009) that advocates for the inclusion of outdoor education activities into the physical education curriculum. Mark Zmudy, Assistant Professor in the Health, Physical Education and Recreation Department at the University of Minnesota Duluth, said that NASPE had referred significantly to outdoor education in their 1991 standards and guidelines, but removed those references in more recent publications. Zmudy acknowledged that there was significant growth in outdoor related activities early on, but with the NASPE retraction, growth had been slowed. He suggested that these new standards, written as vaguely as they are, could allow PE practitioners the leeway to include in their curriculum whatever types of activities they deem suitable, whether they be traditional team-based games or outdoor activities (Personal Communication 2011).

The 3<sup>rd</sup> Edition, NASPE, National Standards and Guidelines for Physical Education Teacher Education (Uhrich et al., 2009) are not as direct in dictating that outdoor activities are to be included in the physical education as in previous editions. In their book “Standards-Based Physical Education Curriculum Development”, Lund and Tannehill propose that the “framework” that the NASPE standards provide can be

“adopted, revised or adapted to meet the needs of each state and the contextual and political factors each faces” (Lund & Tannehill, 2010). It’s no wonder, considering the open ended nature of these standards, that PE pre-service programs and k-12 PE curriculums have not done more to include outdoor education. In fact, departments at the federal level, such as the Department of Health and Human Services and the Centers for Disease Control and Prevention, make more announcements, set more guidelines, and have greater influence as of late than, say, AAHPERD (Trilling, 2006).

Although NASPE is vague in its support for outdoor education, the American Association for Physical Activity and Recreation (AAPAR), another association of NASPE’s parent organization, AAHPERD, is not so vague. AAPAR's stated mission is to, “Enhance quality of life by promoting creative and active lifestyles through meaningful physical activity, recreation, and fitness experiences across the lifespan, with particular focus on community based programs” (citation). AAPAR does offer workshops for teaching adventure skills in the PE classroom such as AAPAR’s “Teaching Adventure Skills in the Gym” workshops and “Get Out! Winter Activities” (citation), but their main focus seems to be on community and conservation based programming. Through the North American Conservation Education Strategy, AAHPERD and NASPE have formed partnerships with conservation organizations such as the Minnesota DNR and Association of Fish and Wildlife Agencies to help support their missions to get people outside (citation).

### **Career and training opportunities available to Outdoor Educators**

Some contend that a degree may not be necessary for one to become an outdoor educator. Plaunt (Plaunt, 2001) states, “An undergraduate degree in Adventure Education



is not, and is unlikely to become, a prerequisite for employment in the adventure education field.” And Medina (Medina, 2001) states, “There is little research, however, to indicate that employment in the field of adventure programming hinges on the possession of an academic degree in a related field”. One reason to choose not to pursue a degree is the costs involved. Adventure Education jobs are relatively low paying. This, in turn, means there is little impetus to join professional associations, or attain costly professional training (Guthrie, 2001). So where does one go to obtain training in Outdoor Education? Medina found that personal experience was the highest rated training background for outdoor/adventure leaders followed by professional conferences, certifications, college courses/training, and academic degree (Medina, 2001, p. 5) Although “academic degree” falls 5<sup>th</sup> on the list, it’s important to note that 91% of those surveyed by Medina had either earned or were pursuing an academic degree (Medina, 2001). Sugerman (Sugerman, 1999, p. 75) also noted that there was a “growing trend for potential leaders to spend several years at a college or university setting in a degree program specifically designed to teach them the skills and techniques of outdoor leadership.”

Evidently, obtaining an academic degree is an important step to securing employment in the field of Outdoor Education. But what type of degree would one pursue? Does a high school senior need to settle on a specific outdoor career when choosing degree programs, or can he/she choose a program that will allow a variety of career options upon graduation? The University and department from which a degree is acquired dictates to some degree the career options open to a graduate.

The academic degree choices are many, but they are not clear. Universities across the nation offer degree programs in Outdoor Education, but they are not all the same.

Even within a university, the offerings can be confusing. This could be due to the wide-ranging interpretation of Outdoor Education. At the University of Minnesota Duluth for example, one can choose between a B.A.Sc. Degree in Recreation-Outdoor Education, a B.A.Sc. Degree in Teaching Life Science and/or Teaching Earth and Space Science with an Environmental Education Emphasis and finally, a B.A.Sc. in Teaching Physical Education.

There are various job options available to those interested in Outdoor Education careers. A list of position titles for Outdoor/Adventure Leaders gathered from a 2001 survey included: college/university faculty (assistant professor, full professor, college instructor or faculty); instructor (assistant, lead, outdoor educator, naturalist, environmental educator); leader (assistant, trip leader, field supervisor); counselor (mentor); facilitator; owner (president, CEO, trainer, consultant); director (assistant, executive); coordinator (assistant); manager; teacher (assistant, field, faculty); therapist (psychology clinician, intern); health promoter (social worker); and graduate student (Medina, 2001). Of the career options listed, most would be considered as taking place in the non-formal setting. These jobs are found in places such as nature centers and summer camps where instructor/student interaction is fleeting, and content mastery is uncertain. The most effective outdoor skill programs on the other-hand, tend to be in structured programs: that are of longer duration; that are culturally appropriate; and where the effects appear to increase further over time ("BenefitsofOutdoorSkills\_WhitePaper\_11-2010\_Final with cover-1.pdf," 2010, p. ix). This type of programming or career option would be considered as taking place in a formal setting- such as the k-12 physical education classroom. Sometimes, though, a person trained to provide outdoor education

in the non-formal setting is not suited to work in the formal setting. Ken Gilbertson, Associate Professor in the Health, Physical Education and Recreation Department at the University of Minnesota Duluth, related that in a national search to fill a faculty position, the applicants with degrees related to non-formal Outdoor Education were unable to operate in the formal setting (Personal Communication 12/4/2011). That the most effective outdoor skills programs are structured and of long duration i.e. taking place in the formal setting, and that most educators teaching outdoor skills are trained to provide in the non-formal setting, raises several questions – the two most important being: How can the outdoor educator be trained to effectively teach in the formal setting, and what is the motivation for them to make that choice?

## **Chapter 3**

### **METHODOLOGY**

#### **Introduction**

The barriers preventing pre-service students from utilizing outdoor education (OE) in the physical education (PE) setting are unknown. There is strong national endorsement for including outdoor adventure and challenge activities in the physical education classroom yet, for whatever reasons, PE practitioners still cling to the traditional sport oriented method of physical education. Assuming that physical educators were allowed to include outdoor education in their classrooms where it previously had not existed, they would require both the knowledge to comfortably deliver the activities, and the desire to do so. Unfortunately, many PE practitioners leave their institutions unprepared for either. One factor for this may be that suitable candidates are more interested in typical adventure education careers offered through employment at places such as Outward Bound and college outdoor programs. Another factor may be that current PE pre-service teachers do not value incorporating OE in the PE curriculum. The aim of this research is to survey current PE and OE pre-service teachers to discover how they perceive the PE/OE pre-service landscape, and to explore the factors that motivated them to choose one program over the other. This chapter addresses the method of research, the selection of subjects, the expected results, the conditions of actual testing and an analysis of the results.

**Research Design**

The research question dictates that a cross-sectional survey be used to gather the opinions of current PE and OE pre-service teachers attending Universities that include program areas of PE and OE. The survey will be created using UM Survey, a University of Minnesota online survey tool managed by the Office of Information Technology. The survey will be delivered by email. Academic advisors in each program will direct their students to complete the electronic survey. The survey included an introduction, a statement of support from the academic advisors, the survey, and a link for participants to review the final results of the survey. The survey will be open for two weeks following email distribution. Three days prior to the close of the survey, non-respondents will receive a follow-up email reminder, requesting they complete the survey.

**Subject Selection**

Students who are currently enrolled in degree required courses in either PE or OE teacher preparation programs at the University of Minnesota Duluth, University of Wisconsin Lacrosse and the University of Wisconsin Steven's Point will be surveyed. Purposeful sampling will be used, and these three universities are known to have degree programs in both areas.

**Outcome Measures**

Outcome measures will be determined through the use of an online survey. The survey instrument consists of 24 items. Face, content and criteria validity will be pilot tested using a panel of experts. Criteria for the panel are:

Expertise in survey research

Expertise in OE and/or PE teacher education

Reliability of the instrument will be determined through IRB approval.

### **Conditions of Testing**

After the respondents are identified, they will be sent an email invitation to participate in the electronic survey. The survey will be administered Fall semester, 2012, and will take approximately 10-15 minutes to complete. A follow-up email will be sent three days before the end of the testing period to remind non-respondents to complete the survey.

### **Treatments**

Because this study is establishing a baseline measure of perception, no treatment will be performed on respondents. This survey is intended to collect data for descriptive, not predictive, purposes.

### **Data Analysis**

Analysis will be conducted using the Statistical Package for the Social Sciences (SPSS) and will measure the following:

- Frequencies
- Measures of central tendency
- Cross-tabulations

Frequencies will measure types of motivating factors. Measures of central tendency will help determine the most common motivating factors. Cross tabulation will be used to create multivariate tables to examine relationships among variables.

**Conclusion**

The research question dictates that a cross-sectional survey be used to gather the opinions of current PE and OE pre-service teachers attending Universities that include program areas in both PE and OE. Subjects will be students who are currently enrolled in degree-required courses in either PE or OE teacher preparation programs at the University of Minnesota Duluth, University of Wisconsin Lacrosse and the University of Wisconsin Steven's Point. Outcomes will be established through the survey instrument, which will be available to the sample for a two-week period. Data will be analyzed using SPSS and will be described in detail in chapter four.

## CHAPTER 4

**RESULTS****Introduction**

The “Motivation for Choosing a Major” survey is an online survey developed using the University of Minnesota online survey tool UM Survey. Survey invitations were distributed to current Physical Education and Outdoor Education majors at the University of Minnesota Duluth, University of Wisconsin Stevens Point and University of Wisconsin Lacrosse. The responses were sorted and analyzed for measures of frequencies and cross tabulation using UM Survey tools and Microsoft Excel spread sheets. Subsequent tables and figures which display graphical representations of statistical information, have been created using Microsoft Excel.

**Results**

The survey questions were presented using a variety of different formats, including multiple-choice, scales, arrays and open text. Several items were listed as “open,” where respondents could elaborate or provide an alternative answer. Outdoor Education and Physical Education majors were led through the survey based on their choices for “Current major”, “Whether they transferred or not” and “Whether they had considered the other major or not”. The survey questions were identical for those choosing either “Outdoor Education” or Physical Education” as their major, but the response choices were different for each major. Double majors, those in both the Physical Education and Outdoor Education majors, followed a different track through the survey. There were no Double majors responding to this survey.



The questions asked respondents about the primary influences on their choice of major, whether they had transferred from the other major, primary influences for transferring, whether they had considered the other major, primary influences for not pursuing the other major even though they had considered it, primary influences for not considering the other major, about how much of their middle school and high school PE classes consisted of OE activities, from where or from whom did the OE activities at their middle school and high school take place, their age, gender and race, and finally, an open text box where they could share any final comments.

The University of Wisconsin - Lacrosse comprises over 57 percent of the total respondents and has the most even split between majors having PE with 23 respondents and OE with 18 respondents. The University of Minnesota Duluth comprises 28 percent of the total respondents and skews toward OE with 14 respondents compared to PE with 6 respondents. The University of Wisconsin - Stevens Point comprises 15 percent of the total respondents and skews toward PE with 7 respondents compared to OE with 4 (see figure 1).

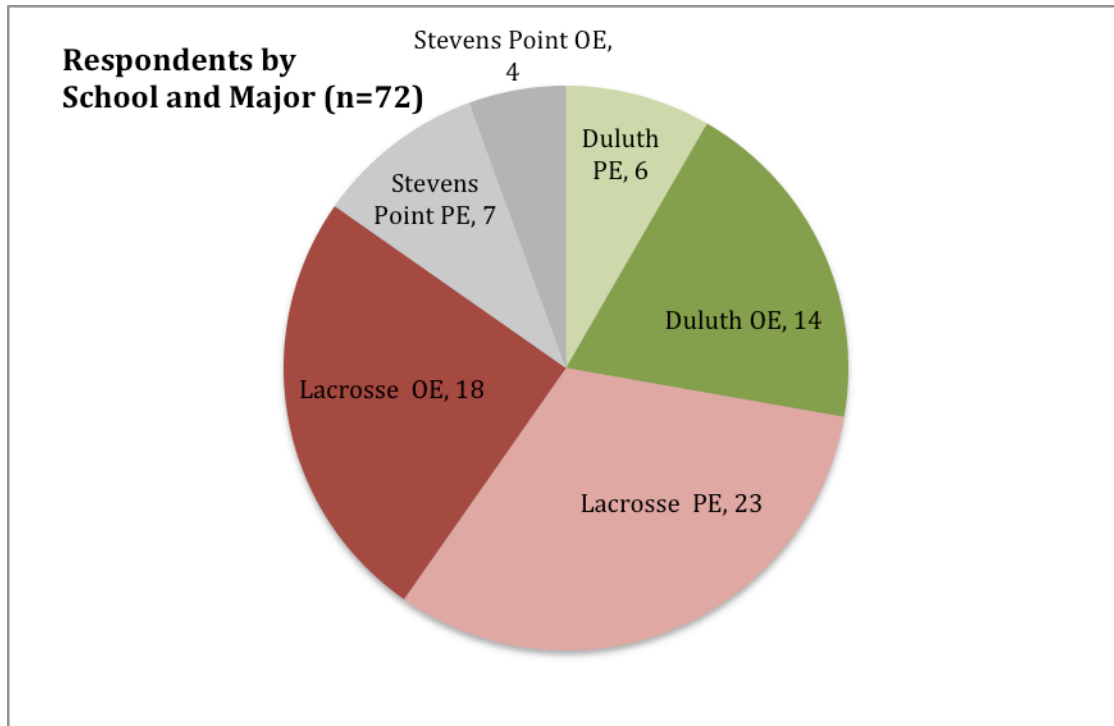


FIGURE 1: RESPONDENTS BY SCHOOL AND MAJOR

Gender is split pretty evenly when compared to both the total population (54 percent female) and major (no more than 11 percent difference for each). The split between PE and OE majors is even with 36 respondents for each (see figure 2).

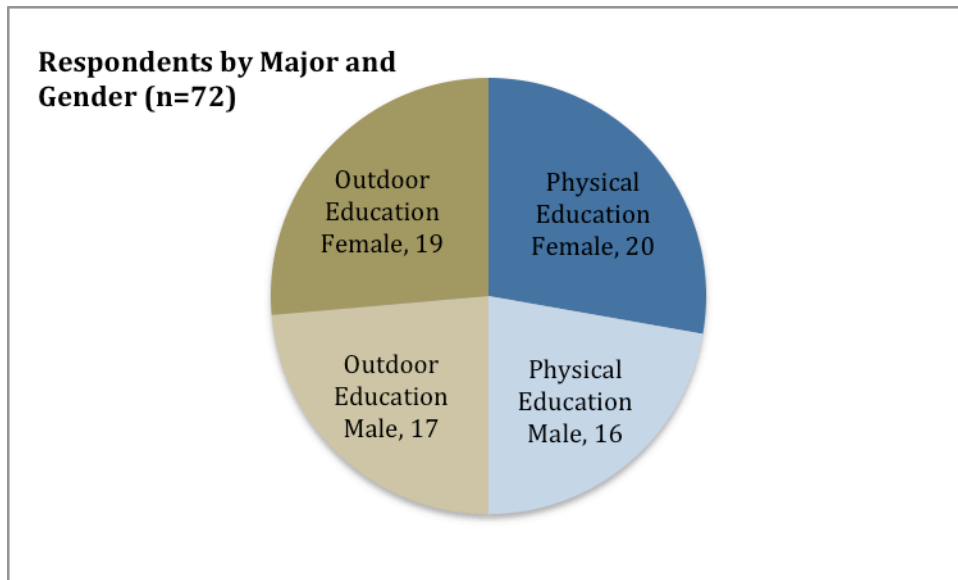


FIGURE 2: RESPONDENTS BY MAJOR AND GENDER

Of the 72 respondents, 69 indicated that they are Caucasian, 1 Asian/Pacific Island, 1 Hispanic, 1 Native American, 0 African American/Black and 0 Biracial/Mixed (see table 1).

Table 1: Respondents by Race/Ethnicity

Race/Ethnicity	N	%
Caucasian	69	95.83%
Asian/Pacific Island	1	1.39%
African American/Black	0	0.00%
Hispanic	1	1.39%
Biracial/Mixed	0	0.00%
Native American	1	1.39%

Question #PE-1 sought to determine the influences that led to the respondent's choice of PE as a major. Respondents selected from a list of pre-determined influences and could also provide an alternative influence or elaborate. Eighty-one percent (n=29) of

respondents indicated that they wanted to teach people how to stay physically fit. Fifty-six percent (n=20) of respondents indicated that they wanted a job that would help them stay active. Fifty percent (n=18) of respondents indicated that PE was their favorite class in high school. Just under half 47% (n=17) of respondents indicated that being a high school coach was important to them, and (n=17) 47% indicated that their being good at sports was an influence (see figure 3). Teaching others how to stay physically fit, along with having a job that would help them maintain their own fitness, are major influences for PE majors. Enjoying physical education classes (n=18) 50% and being good at sports during their middle and high school years (n=17) 47% were also chosen as being influential.

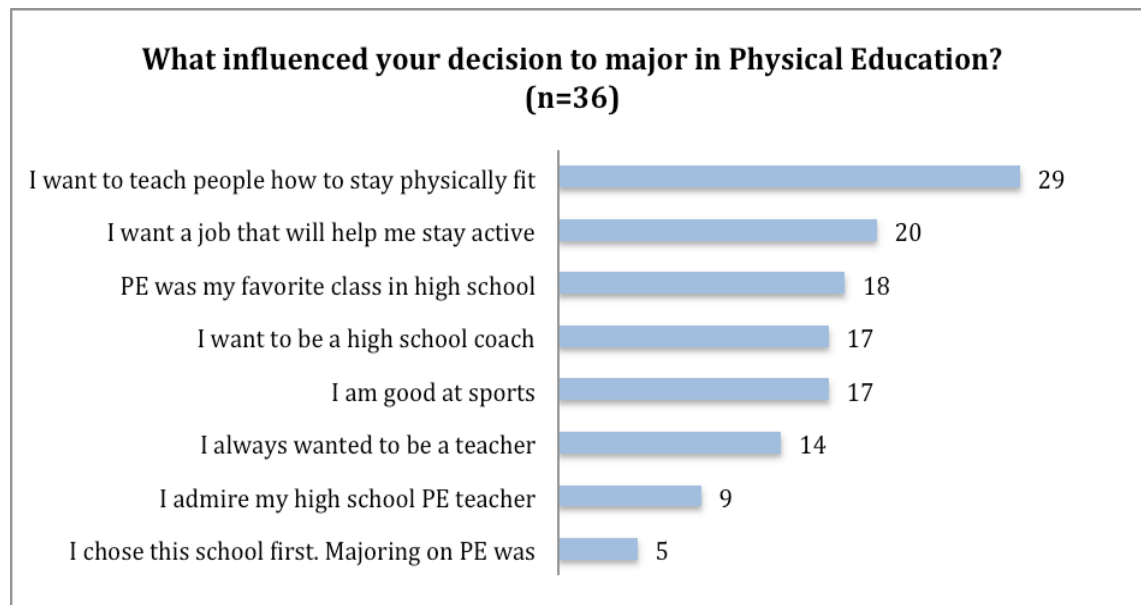


FIGURE 3: INFLUENCES TO CHOOSING PE AS A MAJOR

Questions #PE-2 through #PE-6 sought to determine whether or not PE majors had ever considered OE as a major, and what influences might have shaped their decision to not pursue the major. Question #PE-2 asked respondents if they had transferred from an OE major, and if they had transferred, question #PE-3 asks why they had transferred.

None of the PE respondents had transferred from an OE major. Question #PE-4 asked respondents if they had ever considered OE as a major. For those who had considered OE as a major (11 of the 36 respondents), question #PE-5 asked why they did not pursue the OE major even though they had considered it. Nearly half (45%) indicated that they did not know that the OE major existed. Also on the list of influences were concerns with not having enough job security (n=3), not being able to teach enough physical fitness (n=2) and not being able to teach in a school setting (n=2) (see figure 4).

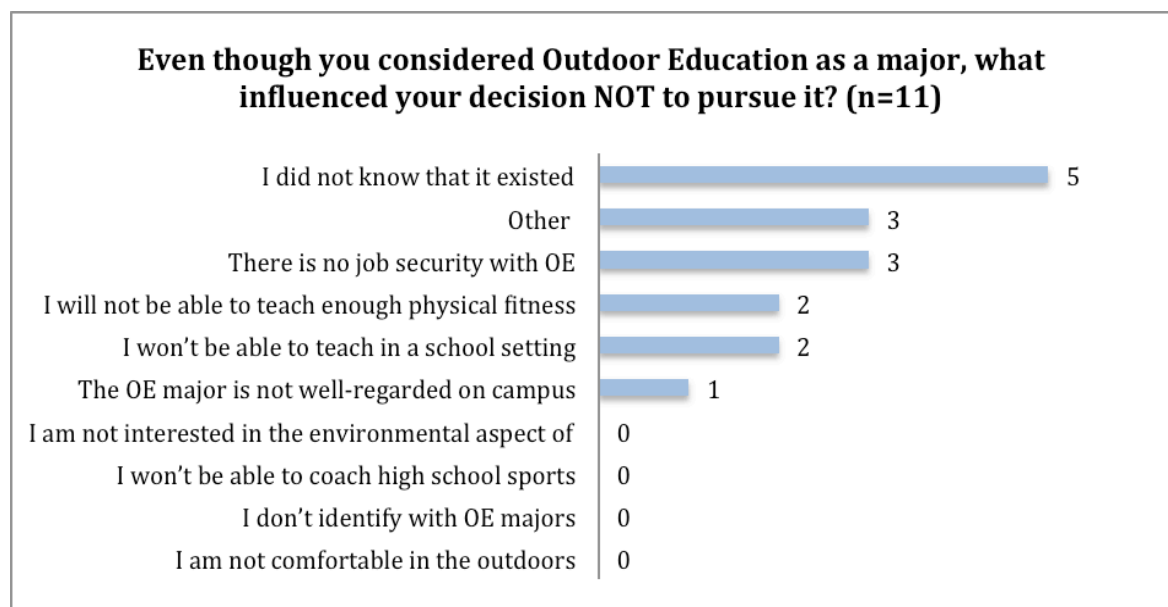


FIGURE 4: INFLUENCES TO NOT PURSUING OE AS A MAJOR

For those who had never considered OE as a major (25 of 36 respondents), question #PE-6 asked why they had never considered OE as a major. Most (80%) indicated that they did not know that the OE major existed. The remaining choices did not receive much consideration with the next highest choice selected by only 16 percent of respondents (see Figure 5).

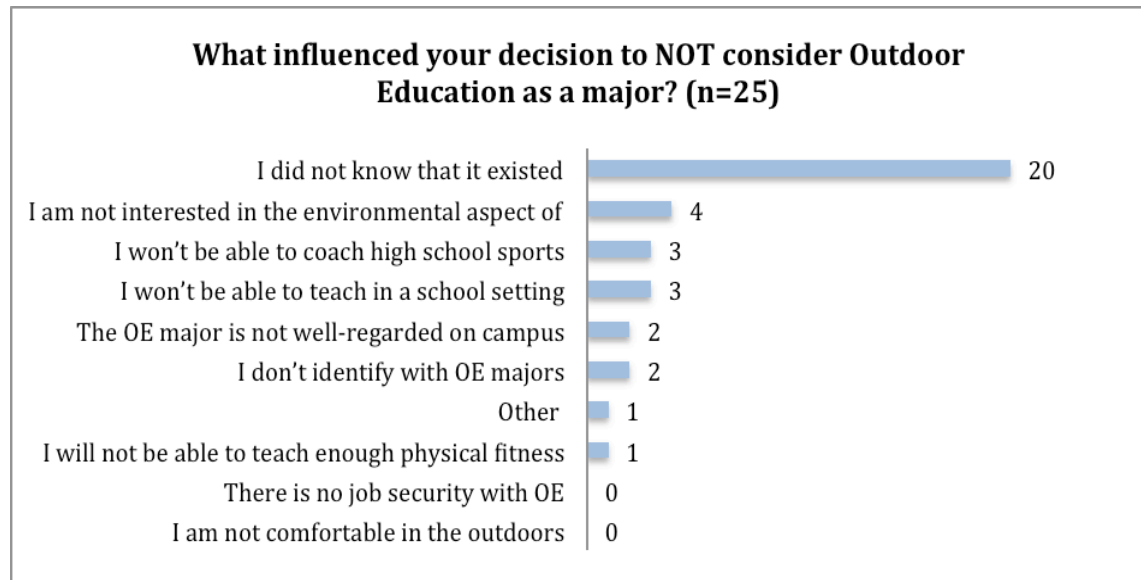


FIGURE 5: INFLUENCES TO NOT CONSIDERING OE AS A MAJOR

Question #OE-1 sought to determine the influences that led to the respondent's choice of OE as a major. Respondents selected from a list of pre-determined influences and could also provide an alternative influence or elaborate. Ninety-two percent (n=33) of respondents indicated that they wanted to work in the outdoors. Eighty-eight percent (n=32) of respondents indicated that they spend a lot of time in the outdoors. Eighty-three percent (n=30) of respondents indicated they wanted to teach outdoor adventure activities. Sixty-seven percent (n=24) of respondents indicated that they wanted to learn more about the environment and 55% (n=20) wanted to help protect the environment. More OE majors than PE majors (24 to 20) indicated wanting a job that would help keep them active. More than half 53% (n=19) wanted to teach people how to stay physically fit yet only 11% (n=4) indicated that they always wanted to be a teacher (see figure 6).

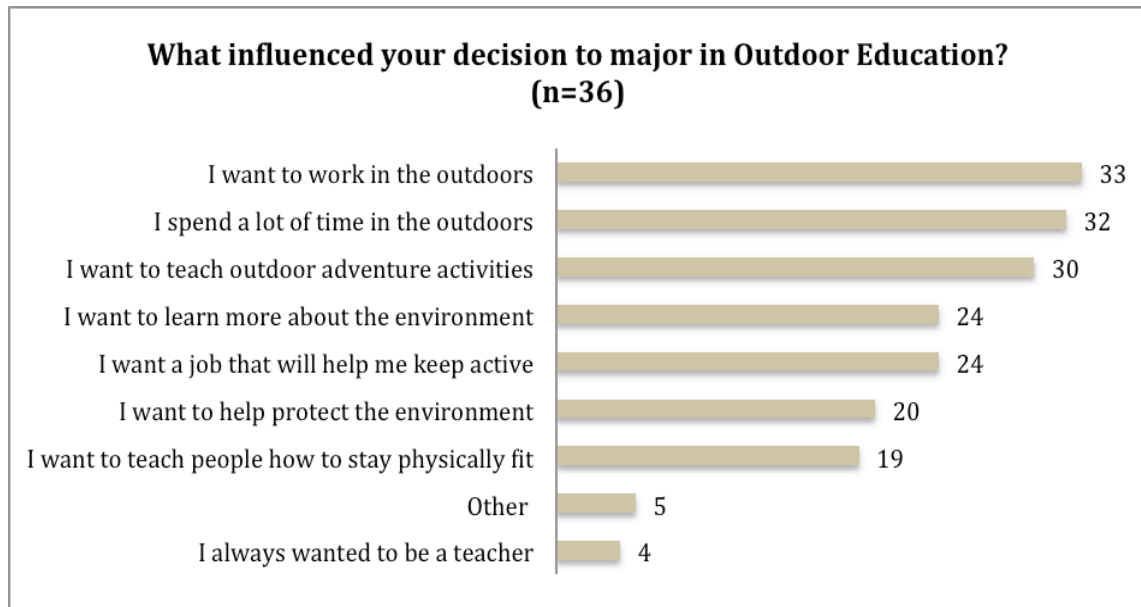


FIGURE 6: INFLUENCES TO CHOOSING OE AS A MAJOR

Questions #OE-2 through #OE-6 sought to determine whether or not OE majors had ever considered PE as a major, and what influences might have shaped their decision to not pursue the major. Question #OE-2 asked respondents if they had transferred from a PE major, and if they had transferred, question #OE-3 asked why they had transferred. Four of the OE respondents had transferred from a PE major. Three of the four transfers cited wanting to teach in the outdoors, and two of the four transfers cited not wanting to teach in a school as influencing their decision to transfer (see figure 7).

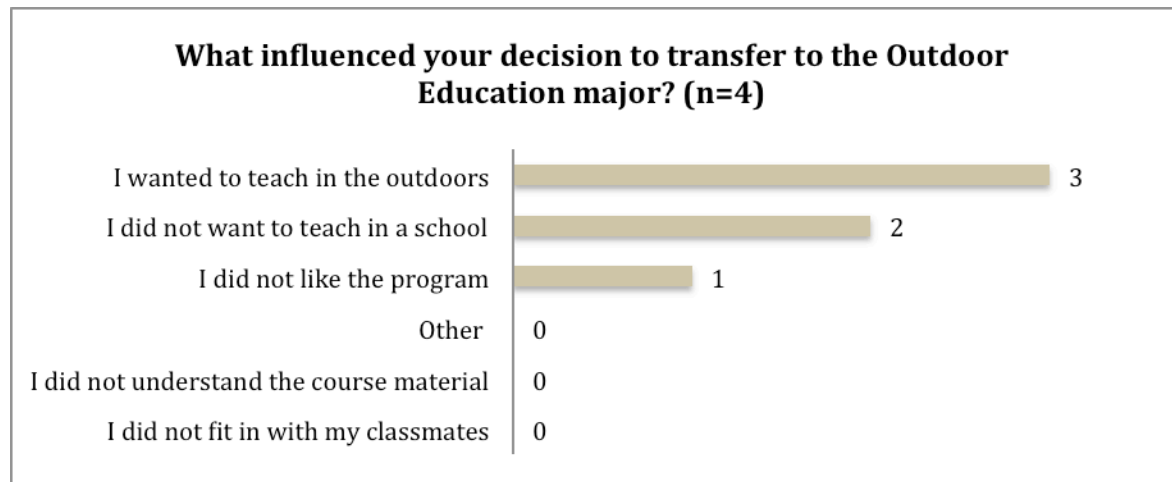


FIGURE 7: INFLUENCES TO NOT PURSUING PE AS A MAJOR

Question #PE-4 asks respondents if they had ever considered PE as a major. For those who had considered PE as a major (15 of the 36 respondents), question #OE-5 asks why they did not pursue the PE major even though they had considered it. A majority 73% (n=11) indicated that they did not want to teach in a school. Close to half 40% (n=6) indicated that there are not enough career options in the PE field. Also on the list of influences were concerns with not identifying with PE majors (n=3), not being able to teach enough outdoor adventure education (n=3) and not being able to get outside enough (n=2) (see figure 8).



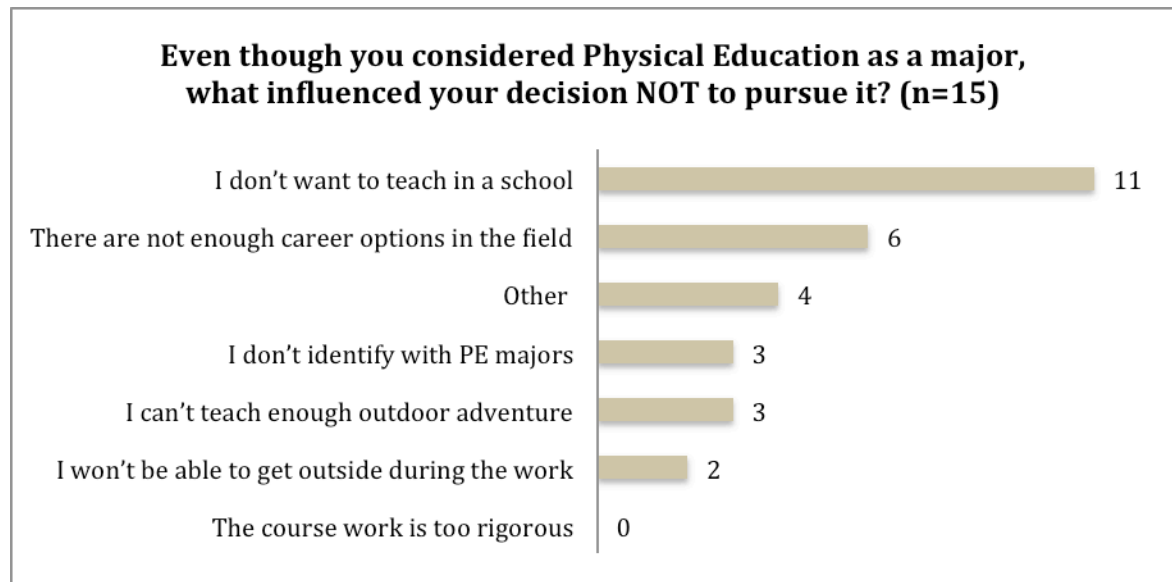


FIGURE 8: INFLUENCES TO NOT PURSUING PE AS A MAJOR

For those who had never considered PE as a major (17 of 36 respondents), question #OE-6 asks why they had never considered PE as a major. Around half 53% (n=9) indicated that they did not want to teach in a school. Forty-one percent (n=7) of respondents indicated that they do not identify with PE majors, and twenty-nine percent (n=5) were concerned with not being able to teach enough adventure activities as a PE teacher. Also on the list of influences were concerns with there not being enough career options in the field, and not being able to get outside during the work week. Only 1 respondent indicated that they were not aware that the PE major existed on campus (see figure 9).

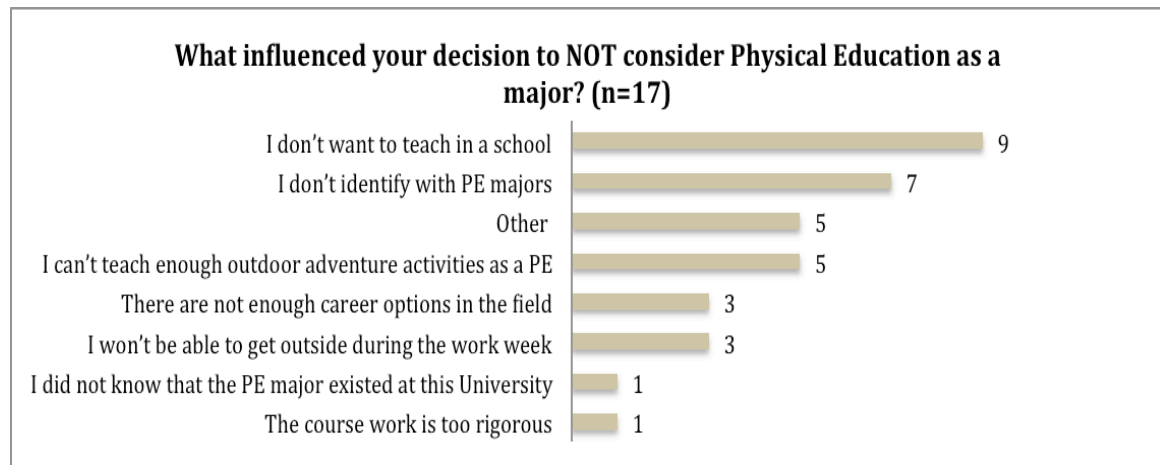


FIGURE 9: INFLUENCES TO NOT CONSIDERING PE AS A MAJOR

Although most of the response choices were unique to each major, there is enough related data to compare both majors. The related data includes; knowing the existence of the other major, teaching in a formal setting, not identifying with students from the other major, future job security and career options.

For respondents who had never considered the other major as an option (PE majors n=25, OE majors n=17), PE majors were far more likely to indicate that they did not know that the other major existed (80 percent for PE majors, 6 percent for OE majors) (see figure 10) and of the 11 PE majors who had considered OE as an option, 5 (45%) indicated that they did not know that the OE major existed at their school (see figure 11).

Of the OE majors who had never considered the other major as an option, 9 out of the 17 indicated that they did not want to teach in a school (see figure 10), and of the OE majors who had considered PE as a major, 11 of the 15 indicated that they did not want to teach in a school (see figure 11). One OE respondent shared this, “I don't like standardized curriculums that exist in schools”, and another shared this, “Being a gym teacher is boring.”

In response to the question, “What influenced your decision to major in (your major)?, 39% of PE majors chose “I always wanted to be a teacher” compared to 11% for OE majors (see figure 12).

For respondents who had never considered the other major as an option (PE majors n=25, OE majors n=17), 7 OE majors indicated that they did not identify with students from the other major versus 2 for PE majors (see figure 10).

Of the PE and OE majors who had considered (the other major), 6 of 15 OE majors chose “There are not enough career options in the field”, and 3 of 11 PE majors chose “There is no job security with OE” as influencing their decision not to pursue the major (see figure 11). One respondent shared this, “I didn’t want to be restrained from options, more broad.”

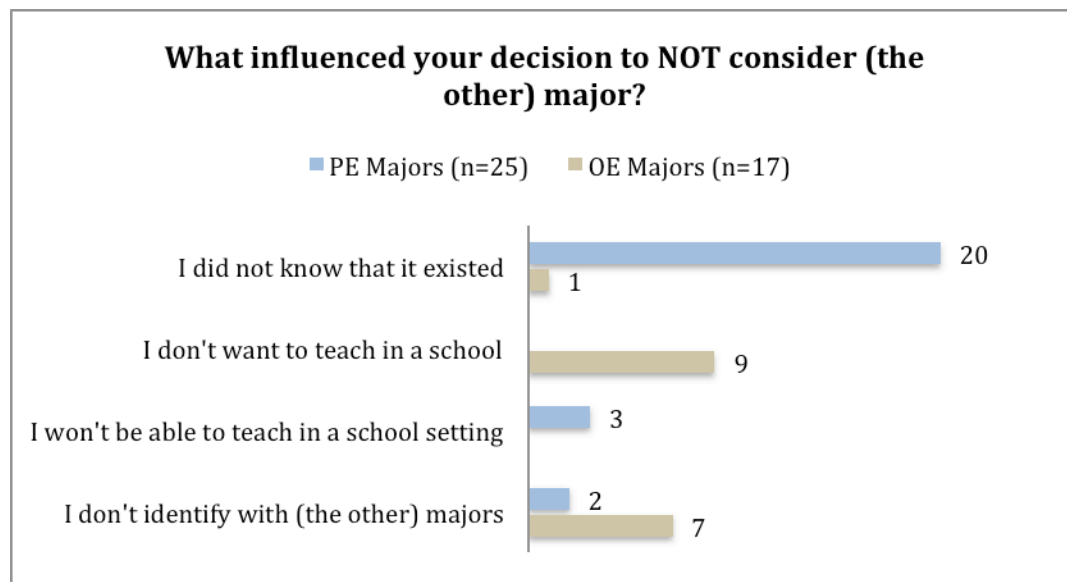


FIGURE 10: INFLUENCES TO NOT CONSIDERING THE OTHER MAJOR (PE MAJORS VS. OE MAJORS)

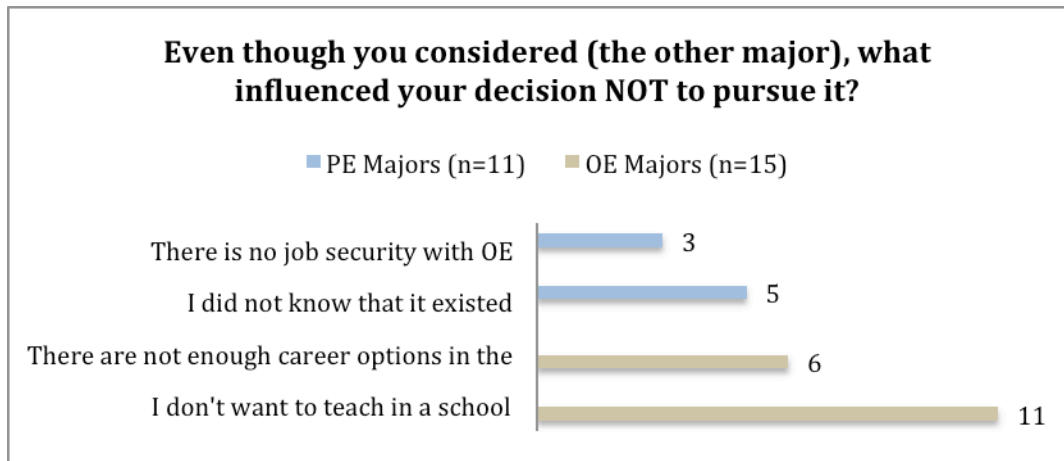


FIGURE 11: INFLUENCES TO NOT PURSUING THE OTHER MAJOR (PE MAJORS VS. OE MAJORS)

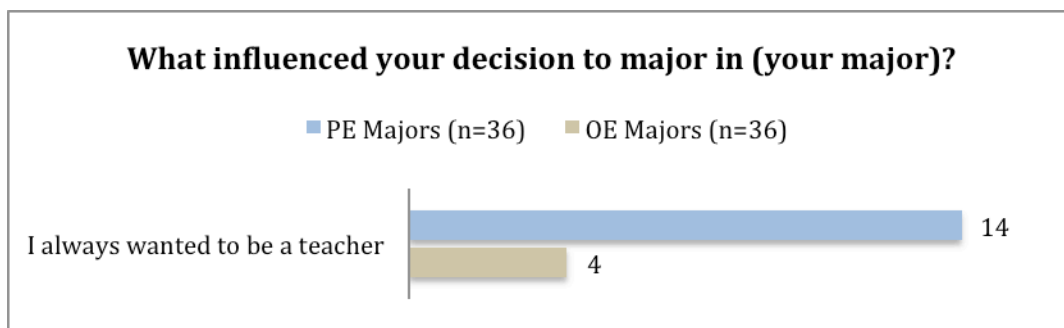


FIGURE 12: INFLUENCES TO CHOOSING YOUR MAJOR (PE MAJORS VS. OE MAJORS)

The remaining questions sought to determine where and how much outdoor education activities the respondents might have received in their middle schools and high schools. Responses to question #4 seem to indicate that compared to OE majors, PE majors perceived that their middle and high school PE classes consisted of less outdoor education activities. This is particularly evident when comparing the numbers of respondents who chose “0%” for the question “How much of your middle school and or high school physical education classes consisted of outdoor education activities” (see figure 13).

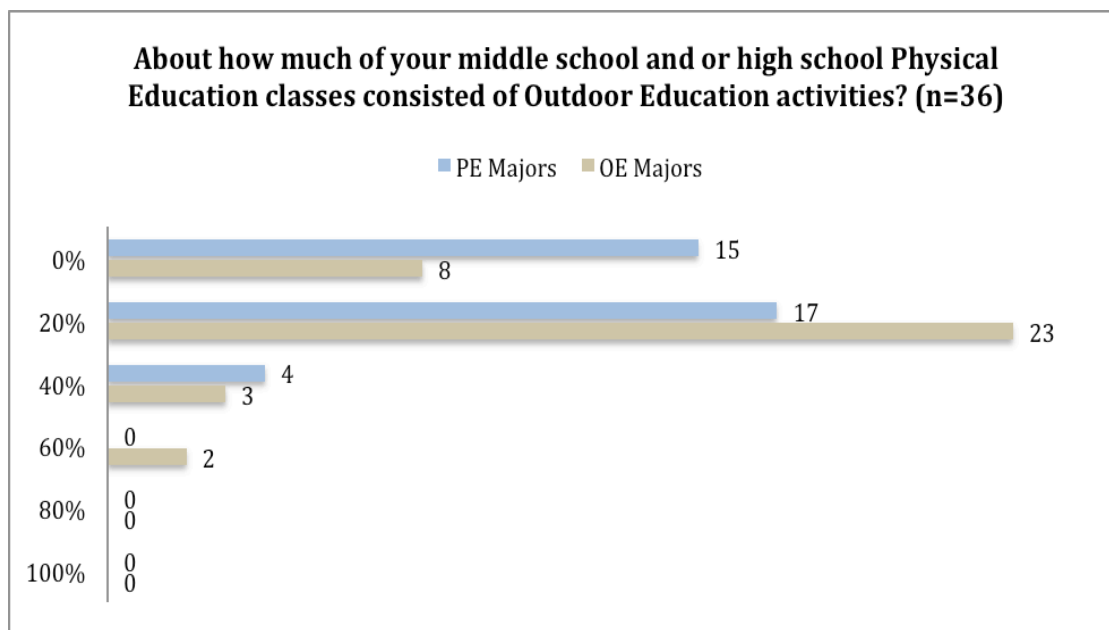
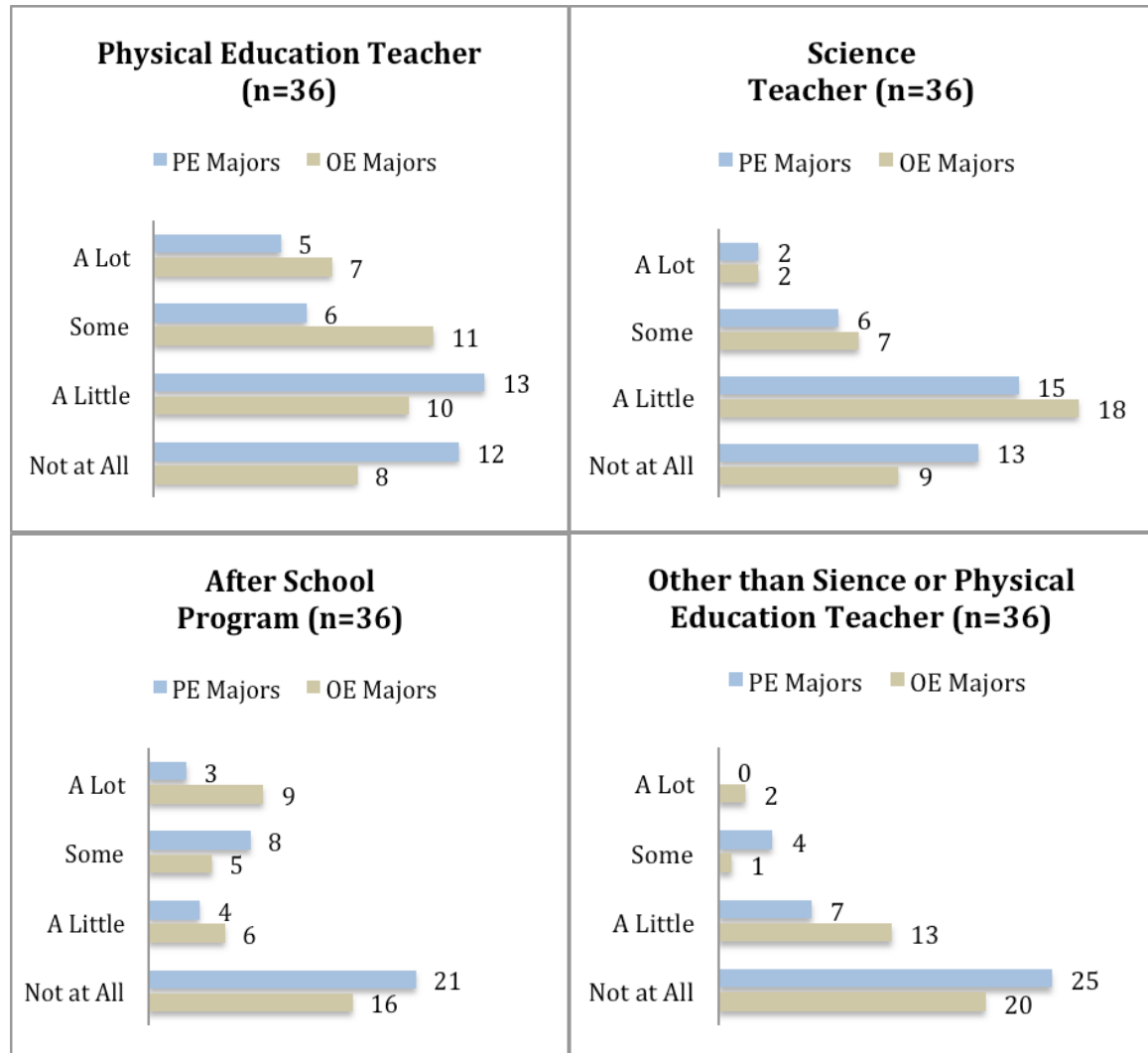


FIGURE 13: AMOUNT OF OUTDOOR EDUCATION ACTIVITIES IN SECONDARY PE CLASSES

For question #5, respondents were asked to rate the amount of outdoor education activities originating from teachers and program areas at their middle school and high school using “A Lot”, “Some”, “A Little”, and “Not at All” as measures. Physical education teacher scored the highest for amount of outdoor education activities provided followed by science teacher, then after school program, then teachers other than physical education and science teacher, then environmental education program and finally environmental education camp. The data for physical education teacher and science teacher are quite similar, indicating that nearly as much outdoor education is provided by science teachers as is provided by physical education teachers. For each of the providers taken individually, PE majors were more likely to choose “Not at All”, and OE majors were more likely to choose “A Lot” indicating that OE majors perceived more outdoor education activities as coming from their middle and high schools (see figure 14). One OE major had this to share about his experience with outdoor education at his high

school, “I have a strong interest in OE but never had any experience with it in school until college. I believe since I went to a private high school it made it even less likely that I would learn about OE.”



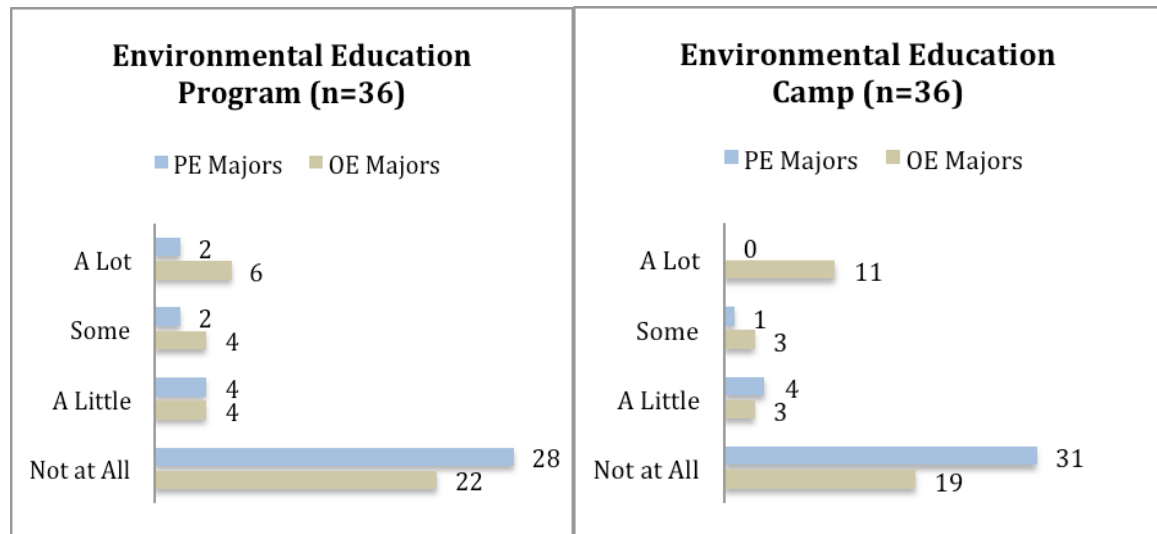


FIGURE 14: WHERE DID THE OUTDOOR EDUCATION ACTIVITIES TAKE PLACE AT YOUR MIDDLE AND/OR HIGH SCHOOL?

## Conclusion

The survey results reflect the responses of 41 University of Wisconsin lacrosse students, 20 University of Minnesota Duluth students and 11 University of Wisconsin Stevens Point students enrolled in either the PE major or OE major at their university. Respondents were evenly split between the two majors at 36 each, with females comprising 54% of the total.

Significant influences for choosing PE as a major included teaching others how to stay physically fit, and having a job that would help them maintain their own fitness. Enjoying physical education classes and being good at sports during their middle and high school years were also chosen as being influential. Influences for PE majors not choosing the OE major included not knowing that the other major existed and not having enough job security in OE.

Significant influences for choosing OE as a major included teaching others how to stay physically fit, working in the outdoors, teaching outdoor adventure activities and

having a job that would help keep them active. Learning more about the environment and helping to protect the environment were also chosen as influential. Influences for OE majors not choosing the PE major included not wanting to teach in a school setting, not having enough career options and not identifying with PE majors.

When looking at the amount of outdoor education activities originating from teachers and program areas at their middle school and high school, compared to OE majors, PE majors perceived that their middle and high school PE classes consisted of less outdoor education activities. Both majors perceived that their physical education teachers provided the most outdoor education, but data for physical education teachers and science teachers was quite similar, indicating that nearly as much outdoor education is provided by science teachers as is provided by physical education teachers.

Chapter Five will take a closer look at the survey responses, and will consider those premises in relation to themes in the literature. Chapter Five will also consider the implications of the results, offer recommendations for getting more outdoor education into the physical education curriculum, and propose opportunities for future research.



## **CHAPTER 5**

### **DISCUSSION**

This study was begun to find out how more outdoor education can find its way into the physical education curriculum. This question is most important to the children in our secondary education system, but it's also important to the college students in university PE and OE programs across the nation who would be, or could be, teaching these children. Because I work with these students at the University of Minnesota Duluth, and because I believe that they will be the agents for change in the physical education landscape, I chose to make them the focus of this study. The survey responses shed light on the influences that shape their career choices as well as their perceptions of the physical education and outdoor education landscapes.

Both PE majors and OE majors indicated that being active was an important influence to choosing their major, and that obtaining a job that would provide them the opportunity to remain active was significant. This indicates a perception that working in the physical education and outdoor education fields promises a continued active lifestyle. The greatest influence for PE majors was a desire to teach people how to stay physically fit (n=29). While the desire to teach people how to stay physically fit did not rank as high for OE majors (n=19), the desire to teach outdoor adventure activities ranked quite high (n=30). This indicates a perception among OE majors that teaching outdoor adventure activities and teaching physical fitness are not synonymous. It was surprising, too, that so

few OE majors chose, “I always wanted to be a teacher” as an influence (4 as opposed to 14 for PE majors). This could indicate that they perceive a teacher as someone who works solely in a school. OE majors might also view physical fitness teaching as taking place only in a formal school setting, and most OE majors indicated an aversity to teaching in the formal setting with 22 of 36 choosing, “I don’t want to teach in a school” as an influence to not considering PE as a major. OE majors also indicated that the physical education profession was too narrow in its career options. PE majors were not as disregarding of the other major. There was some concern over the lack of job security that an outdoor education degree might provide, but most (25 of 36) chose “I did not know that the OE major existed” as the reason for either not considering, or not pursuing, the OE major.

Discovering that an OE major exists as an alternative to PE while already enrolled in the major may prompt some to cross-over (4 of the 36 OE majors surveyed had transferred from a PE major), still, switching majors is a poor alternative to being informed of the options before enrolling. Certainly colleges could better promote their OE programs, and high school guidance counselors could better inform students, but this would only serve to get more students enrolled in OE majors. The problem is that OE majors are adverse to teaching in a formal setting, and current PE practitioners are indifferent to incorporating outdoor education. And as indicated earlier, the most effective outdoor education skills programs are structured and of long duration i.e. taking place in the formal setting. The physical education classroom would be the ideal place for this to occur. In fact, at least two national educational institutions advocate providing outdoor education through the physical education curriculum; The National Council for

Accreditation of Teacher Education (NCATE) and the National Association for Sports and Physical Education (NASPE). Unfortunately, physical education teachers are not providing much outdoor education – around 20% or less of the curriculum according to the survey. One could suggest any number of obstacles to providing outdoor education, including expense, and lack of space and time, but “want to” and “know how” might be the biggest hurdles. According to the survey, science teachers provided nearly as much outdoor education at their schools as physical education teachers - presumably done with the same or less resources.

Getting more outdoor education into the physical education curriculum might just come down to finding the right person for the job. But it's not quite that simple. First, high school graduates with an aptitude and interest in outdoor education might dismiss becoming physical education teachers because they did not experience much outdoor education in their physical education classes. Instead they may have been exposed to it in other settings such as after school programs, school sponsored environmental education camps and summer camps, prompting them to choose to major in OE instead. And second, the outdoor education message that PETE providers are delivering to PE majors may be falling on deaf ears because many PE majors never developed the skill sets and/or desire to teach outdoor education owing to a lack of exposure to it in their physical education classes. Perhaps, expecting an outdoor educator to do the job of a physical education teacher, or visa versa, is like expecting a square peg to fit into a round hole. It might be that the right-man-for-the-job approach is not ideal here, and that, in addition to training PE majors outdoor education skills and aptitudes, a more collaborative and multi-dimensional approach to providing outdoor education should be considered.

**Reccomendations**

- Seeing that science teachers already provide much of the outdoor education at secondary schools, and best practices in education prescribe interdisciplinary cooperation, secondary schools might consider strengthening collaborative efforts between physical education techers and teachers who are already providing outdoor education.
- School districts could team up with city recreation departments, local nature centers, and outdoor education advocacy groups (where staffing, resources, and space already exist) to augment the efforts of physical education teachers.
- Universities could create academic programs such a double major in PE and OE, or teaching science degrees and outdoor education degrees that include courses in teaching physical fitness that would allow graduates to qualify for, yet not be restricted to, teaching physical education.
- A singular approach to instilling healthy active lifestyles in our youth is shortsighted. Neither PE nor OE taken alone can be truly effective. University faculty from the departments that teach these majors should connect for meaningful discussion and collaboration.

**Future Research**

This survey primarily focused on influences for choosing a major, mainly to establish a baseline measure of perceptions. Several important themes emerged that merit additional study. For example, many OE majors indicated that they do not want to teach in a school. It would be interesting to know what it is about teaching in a school that they are adverse to. Another theme of interest is the perception both majors have as to where outdoor education takes place at their secondary schools. It would be informative to make a

thorough assessment of the secondary school physical education/outdoor education landscape. Both majors also indicated a desire to have a job that would help them stay active. It would be interesting to compare the activity levels between physical education teachers and outdoor educators, and those two to careers in general. Using the term Outdoor Education major to identify the Physical Education major counterparts was problematic. The term Outdoor Education major was settled on, for one, because none of the three universities surveyed share the same designation for their “Outdoor Education” major. It would be valuable to compile a list of outdoor education related majors, along with the departments that house them, and the courses required.

### **Summary**

The barriers preventing pre-service students from utilizing outdoor education in the physical education setting are unknown. Who or what the hurdles are has long been a topic of debate. Some identify a lack of resources available to physical education teachers, while others suggest that physical education teachers cling too tightly to the traditional sport oriented method of physical education. When the health and well being of our children is in jeopardy, finding answers to these questions can be rather intimidating at times, but rewarding.

The findings of this study reveals that there are college student who have an interest in providing outdoor education, but are not particularly interested in teaching it to kids in the formal school setting. And that there are college student who are interested in teaching kids in a formal school setting, but are not be particularly interested in providing outdoor education.

Developing students who have both an interest in outdoor education and an interest in teaching in the formal setting is just one important step. Equally important is that all parties invested in the health and well being of our children create an environment within our physical education system that is excepting of outdoor education principles and supportive of its advocates.

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## **APPENDICES**

**APPENDIX A: LETTERS OF SUPPORT**

## UNIVERSITY OF MINNESOTA

*Duluth Campus**Department of Health, Physical Education & Recreation**College of Education and Human Service Professions**110 Sports & Health Center**1216 Ordean Court**Duluth, MN 55812-3032**Office: 218-726-7120**Fax: 218-726-6243**www.d.umn.edu/hpwr*

May 11, 2012

Pat Kohlin  
University of Minnesota Duluth  
153 SpHC  
1216 Ordean Court-UMD  
Duluth, MN 55812

Dear Pat:

This letter is to inform you that I have reviewed your survey and I am pleased to support your research study titled, "Motivation for Choosing a Major." It is my understanding the project will begin on September 18, 2012. Our department advisors are in direct contact with your targeted students. We will provide them the survey link by email. I acknowledge that records kept of our students' responses will not contain any identifying information about them. Likewise, you will not have access to any personal student information such as emails to maintain anonymity and to remain in compliance with HIPAA rules.

I hope that your survey is a success and I look forward to seeing your results.

Sincerely,



Ken L. Gilbertson  
Associate Professor  
University of Minnesota Duluth  
Department of Health Physical Education and Recreation

5-25-11

Date



**University of Wisconsin-Stevens Point**

College of Professional Studies  
Health, Exercise Science & Athletics

Stevens Point WI 54481-3897  
715-346-3147; Fax 715-346-4655  
E-mail: [hesa@uwsp.edu](mailto:hesa@uwsp.edu)  
[www.uwsp.edu/hesa](http://www.uwsp.edu/hesa)

Pat Kohlin  
University of Minnesota Duluth  
153 SpHC  
1216 Ordean Court-UMD  
Duluth, MN 55812

May 22, 2012

Dear Pat:

This letter is to inform you that I have reviewed your survey and I am pleased to support your research study titled, "Motivation for Choosing a Major." It is my understanding the project will begin on September 18, 2012. Our department advisors are in direct contact with your targeted students. We will provide them the survey link by email. I acknowledge that records kept of our students' responses will not contain any identifying information about them. Likewise, you will not have access to any personal student information such as emails to maintain anonymity and to remain in compliance with HIPAA rules.

I hope that your survey is a success and I look forward to seeing your results.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kristi Roth".

Kristi Roth, Ph.D.  
Associate Professor  
Director of Physical Education  
University of Wisconsin-Stevens Point  
(715) 346-2889 [kroth@uwsp.edu](mailto:kroth@uwsp.edu)

University of Wisconsin  
**LA CROSSE**

May 10, 2012

Pat Kohlin  
University of Minnesota Duluth  
153 SpHC  
1216 Ordean Court-UMD  
Duluth, MN 55812

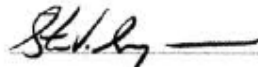
May 5, 2012

Dear Pat,

This letter is to inform you that I have reviewed your survey and I am pleased to support your research study titled, "Motivation for Choosing a Major." It is my understanding the project will begin on September 18, 2012. Our department advisors are in direct contact with your targeted students. We will provide them the survey link by email. I acknowledge that records kept of our students' responses will not contain any identifying information about them. Likewise, you will not have access to any personal student information such as emails to maintain anonymity and to remain in compliance with HIPAA rules.

I hope that your survey is a success and I look forward to seeing your results.

Sincerely,



Chair of the Department of Recreation Management and Therapeutic Recreation  
University of Wisconsin - La Crosse

**College of Science and Health**  
**Recreation Management and Therapeutic Recreation**  
2051 Health Science Center, University of Wisconsin-La Crosse  
1725 State Street, La Crosse, WI 54601  
Phone: (608)785-8207, Fax: (608)785-8206

## UNIVERSITY OF MINNESOTA

*Duluth Campus**Department of Health, Physical Education &  
Recreation  
College of Education and Human Service  
Professions**110 Sports & Health Center  
1216 Ordean Court  
Duluth, MN 55812-3032  
Office: 218-726-7120  
Fax: 218-726-6243  
www.d.umn.edu/hper*

May 11, 2012

Pat Kohlin  
University of Minnesota Duluth  
153 SpHC  
1216 Ordean Court-UMD  
Duluth, MN 55812

Dear Pat:

This letter is to inform you that I have reviewed your survey and I am pleased to support your research study titled, "Motivation for Choosing a Major." It is my understanding the project will begin on September 18, 2012. Our department advisors are in direct contact with your targeted students. We will provide them the survey link by email. I acknowledge that records kept of our students' responses will not contain any identifying information about them. Likewise, you will not have access to any personal student information such as emails to maintain anonymity and to remain in compliance with HIPAA rules.

I hope that your survey is a success and I look forward to seeing your results.

Sincerely,



Jim L. Knapp  
Instructor  
University of Minnesota Duluth  
Department of Health Physical Education and Recreation

5-24-12  
Date

Pat Kohlin  
University of Minnesota Duluth  
153 SpHC  
1216 Ordean Court-UMD  
Duluth, MN 55812

May 5, 2012

Dear Pat:

This letter is to inform you that I have reviewed your survey and I am pleased to support your research study titled, "Motivation for Choosing a Major." It is my understanding the project will begin on September 18, 2012. Our department advisors are in direct contact with your targeted students. We will provide them the survey link by email. I acknowledge that records kept of our students' responses will not contain any identifying information about them. Likewise, you will not have access to any personal student information such as emails to maintain anonymity and to remain in compliance with HIPAA rules.

I hope that your survey is a success and I look forward to seeing your results.

Sincerely,

Jeff Steffen 10/18/12

---

Jeffery P. Steffen  
Director of Graduate Physical Education Teacher Education  
University of Wisconsin - La Crosse  
Department of Exercise and Sport Science

---

Date



University of Wisconsin-Stevens Point  
College of Natural Resources

Central Wisconsin Environmental Station

October 18, 2012

Pat Kohlin  
University of Minnesota Duluth  
153 SpHC  
1216 Ordean Court-UMD  
Duluth, MN 55812

Dear Pat:

This letter is to inform you that I have reviewed your survey and I am pleased to support your research study titled, "Motivation for Choosing a Major." Our department advisors are in direct contact with your targeted students. We will provide them the survey link by email. I acknowledge that records kept of our students' responses will not contain any identifying information about them. Likewise, you will not have access to any personal student information such as emails to maintain anonymity and to remain in compliance with HIPAA rules.

I hope that your survey is a success and I look forward to seeing your results.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Quinn".

Tom Quinn  
Program Manager  
Central Wisconsin Environmental Station  
University of Wisconsin – Stevens Point

10/18/12

Date



**APPENDIX B: INVITATION TO SURVEY**

University of Minnesota Duluth Mail – Motivation For Choosing A Major Survey

12/14/12 2:47 PM



Patrick Kohlin &lt;pkohlin@d.umn.edu&gt;

**Motivation For Choosing A Major Survey**

1 message

**Patrick Kohlin** <pkohlin@d.umn.edu>

Wed, Sep 26, 2012 at 4:44 PM

To: "Roth, Kristi" &lt;Kristi.Roth@uwsp.edu&gt;

Hello-

You have been selected to take part in a survey because the head of your department and/or advisor has on record that you are either a Physical Education major an Outdoor Education (or related) major, or both, at your university. The head of your department and/or your advisor did not actively recruit you for this study. I am interested in knowing why you chose the major you are currently in. My hope is that your answers will help universities better serve students in majors such as the one you are currently enrolled in. If you wish to learn more about this study, please email me at [pkohlin@d.umn.edu](mailto:pkohlin@d.umn.edu) or my advisor, Ken Gilbertson, at [kgilbert@d.umn.edu](mailto:kgilbert@d.umn.edu). Thank you for taking the time to complete this survey. Your feedback is important to me.

A note on privacy: There is no direct benefit to your participation in this survey. You and your responses are anonymous. The record kept of your survey responses does not contain any identifying information about you. By choosing to take this survey, you are giving your consent.

Please go to this url to access the survey:

<https://umsurvey.umn.edu/index.php?sid=58152&lang=um>

--

--

Patrick Kohlin  
Sea Kayak & Marketing Supervisor  
University of Minnesota Duluth  
Recreational Sports Outdoor Program  
153 SpHC, 1216 Ordean Ct - UMD  
Duluth, MN 55812  
(w) 218-726-8801  
(c) 218-590-7350

"The Real Classroom is Outside....Get Into It!"

## APPENDIX C: SURVEY

### Motivation For Choosing A Major

A survey about why you chose the major you are in.

There are 24 questions in this survey.

#### Survey of College Students

##### 1 What is the name of YOUR school? \*

Please choose only one of the following:

- ☐ University of Minnesota Duluth
- ☐ University of Wisconsin Lacrosse
- ☐ University of Wisconsin Stevens Point

##### 2 Select your CURRENT major. \*

Please choose only one of the following:

- ☐ Outdoor Education
- ☐ Physical Education
- ☐ Both (Double Major)

Click on the response that MOST applies to you.

##### 3 How many of years have you been enrolled in your Physical Education major? \*

[Only answer this question if you answered 'Physical Education' to question 'Major']

Please choose only one of the following:

- ☐ Just Started
- ☐ 1 Year
- ☐ 2 Years
- ☐ 3 Years
- ☐ 4 Years
- ☐ Don't Know
- ☐ Other

Please choose ONE of the following answers.

##### 4 What influenced your decision to major in Physical Education? \*

[Only answer this question if you answered 'Physical Education' to question 'Major']

Please choose all that apply:

- ☐ PE was my favorite class in high school
- ☐ I always wanted to be a teacher
- ☐ I am good at sports
- ☐ I admire my high school PE teacher
- ☐ I want to be a high school coach
- ☐ I want a job that will help me stay active
- ☐ I want to teach people how to stay physically fit
- ☐ I chose this school first. Majoring on PE was secondary.

Other:

Other? Please explain.

##### 5 Did you transfer from an Outdoor Education major to the Physical Education major? \*

[Only answer this question if you answered 'Physical Education' to question 'Major']

Please choose only one of the following:

- ☐ Yes
- ☐ No

6

What influenced your decision to transfer to the Physical Education major?

\*

(Only answer this question if you answered 'Physical Education' to question 'Major' and if you answered 'Yes' to question 'Switched OE to PE')

Please choose all that apply:

- ☐ I did not fit in with my classmates
- ☐ I did not like the program
- ☐ I did not understand the course material
- ☐ I wanted to teach in a school
- ☐ I did not have enough opportunity to teach physical activity in the OE major

Other: 

Other? Please explain in the text box above.

7 Have you ever considered Outdoor Education as a major?

\*

(Only answer this question if you answered 'Physical Education' to question 'Major' and if you answered 'No' to question 'Switched OE to PE')

Please choose only one of the following:

- ☐ Yes
- ☐ No

8

Even though you considered Outdoor Education as a major, what influenced your decision NOT to pursue it?

\*

(Only answer this question if you answered 'Physical Education' to question 'Major' and if you answered 'No' to question 'Switched OE to PE' and if you answered 'Yes' to question 'Ever Considered OE')

Please choose all that apply:

- ☐ I did not know that it existed
- ☐ I am not comfortable in the outdoors
- ☐ I don't identify with OE majors
- ☐ I won't be able to teach in a school setting
- ☐ There is no job security with OE
- ☐ I won't be able to coach high school sports
- ☐ The OE major is not well-regarded on campus
- ☐ I am not interested in the environmental aspect of OE
- ☐ I will not be able to teach enough physical fitness in OE

Other: 

Other? Please explain in the text box above.

9

What influenced your decision to NOT consider Outdoor Education as a major?

\*

(Only answer this question if you answered 'Physical Education' to question 'Major' and if you answered 'No' to question 'Switched OE to PE' and if you answered 'No' to question 'Ever Considered OE')

Please choose all that apply:

- ☐ I did not know that it existed
- ☐ I am not comfortable in the outdoors
- ☐ I don't identify with OE majors
- ☐ I won't be able to teach in a school setting
- ☐ There is no job security with OE
- ☐ I won't be able to coach high school sports
- ☐ The OE major is not well-regarded on campus
- ☐ I am not interested in the environmental aspect of OE
- ☐ I will not be able to teach enough physical fitness in OE

Other:

Other? Please explain in the text box above.

**10 How many of years have you been enrolled in your Outdoor Education program? \***

[Only answer this question if you answered 'Outdoor Education' to question 'Major']

Please choose **only one** of the following:

- ☐ Just Started  
☐ 1 Year  
☐ 2 Years  
☐ 3 Years  
☐ 4 years  
☐ Don't Know  
☐ Other

**11**

**What influenced your decision to major in Outdoor Education?**

\*

[Only answer this question if you answered 'Outdoor Education' to question 'Major']

Please choose **all** that apply:

- ☐ I always wanted to be a teacher  
☐ I spend a lot of time in the outdoors  
☐ I want a job that will help me keep active  
☐ I want to work in the outdoors  
☐ I want to learn more about the environment  
☐ I want to help protect the environment  
☐ I want to teach outdoor adventure activities  
☐ I want to teach people how to stay physically fit

Other:

Other? Please explain in the text box above.

**12**

**Did you transfer from a Physical Education major to the Outdoor Education major?**

\*

[Only answer this question if you answered 'Outdoor Education' to question 'Major']

Please choose **only one** of the following:

- ☐ Yes  
☐ No

**13**

**What influenced your decision to transfer to the Outdoor Education major?**

\*

[Only answer this question if you answered 'Outdoor Education' to question 'Major' and if you answered 'Yes' to question 'Switched PE to OE']

Please choose **all** that apply:

- ☐ I did not fit in with my classmates  
☐ I did not like the program  
☐ I did not understand the course material  
☐ I did not want to teach in a school  
☐ I wanted to teach in the outdoors

Other:

Other? Please explain in the text box above.

**14 Have you ever considered Physical Education as a major?**

\*

[Only answer this question if you answered 'Outdoor Education' to question 'Major' and if you answered 'No' to question 'Switched PE to OE']

Please choose **only one** of the following:

- ☐ Yes  
☐ No

**15**

**Even though you considered Physical Education as a major, what influenced your decision **NOT** to pursue it?**

\*

[Only answer this question if you answered 'Outdoor Education' to question 'Major' and if you answered 'No' to question 'Switched PE to OE' and if you answered 'Yes' to question 'Ever Considered PE']

Please choose **all** that apply:

- ☐ I don't want to teach in a school  
☐ I can't teach enough outdoor adventure activities as a PE teacher  
☐ I don't identify with PE majors  
☐ I won't be able to get outside during the work week  
☐ The course work is too rigorous  
☐ There are not enough career options in the field

Other:

Other? Please explain in the text box above.

**16**

**What influenced your decision to **NOT** consider Physical Education as a major?**

\*

[Only answer this question if you answered 'Outdoor Education' to question 'Major' and if you answered 'No' to question 'Switched PE to OE' and if you answered 'No' to question 'Ever Considered PE']

Please choose **all** that apply:

- ☐ I don't want to teach in a school  
☐ I can't teach enough outdoor adventure activities as a PE teacher  
☐ I don't identify with PE majors  
☐ I won't be able to get outside during the work week  
☐ The course work is too rigorous  
☐ There are not enough career options in the field  
☐ I did not know that the PE major existed at this University

Other:

Other? Please explain in the text box above.

**17 How many of years have you been enrolled in both the Physical Education and Outdoor Education majors? \***

[Only answer this question if you answered 'Both (Double Major)' to question 'Major']

Please choose **only one** of the following:

- ☐ Just Started  
☐ 1 Year  
☐ 2 Years  
☐ 3 Years  
☐ 4 Years  
☐ Don't Know  
☐ Other

Please choose **ONE** of the following answers.

**18**

**What influenced your decision to major in both Physical Education and Outdoor Education?**

\*

[Only answer this question if you answered 'Both (Double Major)' to question 'Major']

Please choose **all** that apply:

- ☐ PE was my favorite class in high school.  
☐ I spend a lot of time in the outdoors.  
☐ I always wanted to be a teacher.

- ☐ I chose this school first. My selection of majors was secondary.  
☐ I want to teach people how to stay physically fit.  
☐ I admire my high school PE teacher.  
☐ I want to help protect the environment.  
☐ I want to be a high school coach.  
☐ I want a job that will help me stay active.  
☐ I want to work in the outdoors.  
☐ I want to learn more about the environment.  
☐ I am good at sports.  
☐ I want to teach outdoor adventure activities.

Other:

Other? Please explain in the text box above.

**19 About how much of your middle school and or high school Physical Education classes consisted of Outdoor Education activities? \***

Please choose only one of the following:

- ☐ None  
☐ 20%  
☐ 40%  
☐ 60%  
☐ 80%  
☐ 100%

**20 Where did the Outdoor Education activities take place at your middle school and/or high school? \***

Please choose the appropriate response for each item:

	Not at All	A Little	Some	A Lot
Physical Education Teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Science teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teachers other than Science teacher and Physical Education teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After school program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental Education Program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental Education Camp	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**21 What is your age? \***

Please choose only one of the following:

- ☐ 16 or less  
☐ 17-18  
☐ 19-20  
☐ 21-22  
☐ 23 or greater

**22 What is your gender? \***

Please choose only one of the following:

- ☐ Female  
☐ Male

**23 What is your race/ethnicity? \***

Please choose only one of the following:

- ☐ Caucasian  
☐ Asian/Pacific Island  
☐ African American/Black  
☐ Hispanic  
☐ Biracial/Mixed  
☐ Native American

☐ Other

**24 Thanks for taking the time to respond to this survey. If you have any questions, you can contact either myself, Pat Kohlin, at [pkohlin@d.umn.edu](mailto:pkohlin@d.umn.edu) (218)726-8801 or my advisor, Dr. Ken Gilbertson, at [kgilbert@d.umn.edu](mailto:kgilbert@d.umn.edu) (218)726-6258.**

**Are there any other comments you wish to add?**

Please write your answer here:

**APPENDIX D: FULL SURVEY RESPONSES**

UMSurvey

12/14/12 2:55 PM

**UMSurvey**

**Quick statistics**

**Filter settings**

Results		
<b>No of records in this query: 72</b>		
Total records in survey: 72		
Percentage of total: 100.00%		
<a href="#">Browse</a> <a href="#">Export</a>		

Field summary for Name of School:		
What is the name of YOUR school?		
Answer	Count	Percentage
University of Minnesota Duluth (1)	20	27.78%
University of Wisconsin Lacrosse (2)	41	56.94%
University of Wisconsin Stevens Point (3)	11	15.28%
No answer	0	0.00%

Field summary for Major:		
Select your CURRENT major.		
Answer	Count	Percentage
Outdoor Education (1)	36	50.00%
Physical Education (2)	36	50.00%
Both (Double Major) (3)	0	0.00%
No answer	0	0.00%

Field summary for Years in PE:		
How many of years have you been enrolled in your Physical Education major?		
Answer	Count	Percentage
Just Started (6)	4	5.56%
1 Year (1)	5	6.94%
2 Years (2)	8	11.11%
3 Years (3)	9	12.50%
4 Years (4)	8	11.11%
Don't Know (5)	1	1.39%
Other <a href="#">Browse</a>	1	1.39%
No answer	0	0.00%



Field summary for Why PE Chosen:		
What influenced your decision to major in Physical Education?		
Answer	Count	Percentage
PE was my favorite class in high school (1)	18	25.00%
I always wanted to be a teacher (2)	14	19.44%
I am good at sports (3)	17	23.61%
I admire my high school PE teacher (4)	9	12.50%
I want to be a high school coach (5)	17	23.61%
I want a job that will help me stay active (6)	20	27.78%
I want to teach people how to stay physically fit (7)	29	40.28%
I chose this school first. Majoring on PE was secondary. (8)	5	6.94%
Other <a href="#">Browse</a>	3	4.17%

Field summary for Switched OE to PE:		
Did you transfer from an Outdoor Education major to the Physical Education major?		
Answer	Count	Percentage
Yes (Y)	0	0.00%
No (N)	36	50.00%
No answer	0	0.00%

Field summary for Reason Switch to PE:		
What influenced your decision to transfer to the Physical Education major?		
Answer	Count	Percentage
I did not fit in with my classmates (1)	0	0.00%
I did not like the program (2)	0	0.00%
I did not understand the course material (3)	0	0.00%
I wanted to teach in a school (4)	0	0.00%
I did not have enough opportunity to teach physical activity in the OE major (5)	0	0.00%
Other <a href="#">Browse</a>	0	0.00%

Field summary for Ever Considered OE:		
Have you ever considered Outdoor Education as a major?		
Answer	Count	Percentage
Yes (Y)	11	15.28%
No (N)	25	34.72%

No answer	0	0.00%
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Field summary for Yes to Considered OE:		
Even though you considered Outdoor Education as a major, what influenced your decision NOT to pursue it?		
Answer	Count	Percentage
I did not know that it existed (1)	5	6.94%
I am not comfortable in the outdoors (2)	0	0.00%
I don't identify with OE majors (3)	0	0.00%
I won't be able to teach in a school setting (4)	2	2.78%
There is no job security with OE (5)	3	4.17%
I won't be able to coach high school sports (6)	0	0.00%
The OE major is not well-regarded on campus (7)	1	1.39%
I am not interested in the environmental aspect of OE (8)	0	0.00%
I will not be able to teach enough physical fitness in OE (9)	2	2.78%
Other <a href="#">Browse</a>	3	4.17%

Field summary for No to OE, Why Not:		
What influenced your decision to NOT consider Outdoor Education as a major?		
Answer	Count	Percentage
I did not know that it existed (1)	20	27.78%
I am not comfortable in the outdoors (2)	0	0.00%
I don't identify with OE majors (3)	2	2.78%
I won't be able to teach in a school setting (4)	3	4.17%
There is no job security with OE (5)	0	0.00%
I won't be able to coach high school sports (6)	3	4.17%
The OE major is not well-regarded on campus (7)	2	2.78%
I am not interested in the environmental aspect of OE (8)	4	5.56%
I will not be able to teach enough physical fitness in OE (9)	1	1.39%
Other <a href="#">Browse</a>	1	1.39%

Field summary for Years In OE:		
How many of years have you been enrolled in your Outdoor Education program?		
Answer	Count	Percentage
Just Started (1)	8	11.11%
1 Year (2)	2	2.78%

2 Years (3)	8	11.11%
3 Years (4)	9	12.50%
4 years (5)	6	8.33%
Don't Know (6)	0	0.00%
Other <a href="#">Browse</a>	3	4.17%
No answer	0	0.00%

Field summary for Why OE Chosen:		
What influenced your decision to major in Outdoor Education?		
Answer	Count	Percentage
I always wanted to be a teacher (1)	4	5.56%
I spend a lot of time in the outdoors (2)	32	44.44%
I want a job that will help me keep active (3)	24	33.33%
I want to work in the outdoors (4)	33	45.83%
I want to learn more about the environment (5)	24	33.33%
I want to help protect the environment (6)	20	27.78%
I want to teach outdoor adventure activities (7)	30	41.67%
I want to teach people how to stay physically fit (8)	19	26.39%
Other <a href="#">Browse</a>	5	6.94%

Field summary for Switched PE to OE:		
Did you transfer from a Physical Education major to the Outdoor Education major?		
Answer	Count	Percentage
Yes (Y)	4	5.56%
No (N)	32	44.44%
No answer	0	0.00%

Field summary for Reasons Switch to OE:		
What influenced your decision to transfer to the Outdoor Education major?		
Answer	Count	Percentage
I did not fit in with my classmates (1)	0	0.00%
I did not like the program (2)	1	1.39%
I did not understand the course material (3)	0	0.00%
I did not want to teach in a school (4)	2	2.78%
I wanted to teach in the outdoors (5)	3	4.17%
Other <a href="#">Browse</a>	0	0.00%

Field summary for Ever Considered PE:
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Have you ever considered Physical Education as a major?		
Answer	Count	Percentage
Yes (Y)	15	20.83%
No (N)	17	23.61%
No answer	0	0.00%

Field summary for Yes to Considered PE:		
Even though you considered Physical Education as a major, what influenced your decision NOT to pursue it?		
Answer	Count	Percentage
I don't want to teach in a school (1)	11	15.28%
I can't teach enough outdoor adventure activities as a PE teacher (2)	3	4.17%
I don't identify with PE majors (3)	3	4.17%
I won't be able to get outside during the work week (4)	2	2.78%
The course work is too rigorous (5)	0	0.00%
There are not enough career options in the field (6)	6	8.33%
Other <a href="#">Browse</a>	4	5.56%

Field summary for No to PE, Why Not:		
What influenced your decision to NOT consider Physical Education as a major?		
Answer	Count	Percentage
I don't want to teach in a school (1)	9	12.50%
I can't teach enough outdoor adventure activities as a PE teacher (2)	5	6.94%
I don't identify with PE majors (3)	7	9.72%
I won't be able to get outside during the work week (4)	3	4.17%
The course work is too rigorous (5)	1	1.39%
There are not enough career options in the field (6)	3	4.17%
I did not know that the PE major existed at this University (7)	1	1.39%
Other <a href="#">Browse</a>	5	6.94%

Field summary for Years in double majo:		
How many of years have you been enrolled in both the Physical Education and Outdoor Education majors?		
Answer	Count	Percentage



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Just Started (6)	0	0.00%
1 Year (1)	0	0.00%
2 Years (2)	0	0.00%
3 Years (3)	0	0.00%
4 Years (4)	0	0.00%
Don't Know (5)	0	0.00%
Other <a href="#">Browse</a>	0	0.00%
No answer	0	0.00%

Field summary for Why Double Major:		
What influenced your decision to major in both Physical Education and Outdoor Education?		
Answer	Count	Percentage
PE was my favorite class in high school. (1)	0	0.00%
I spend a lot of time in the outdoors. (9)	0	0.00%
I always wanted to be a teacher. (2)	0	0.00%
I chose this school first. My selection of majors was secondary. (8)	0	0.00%
I want to teach people how to stay physically fit. (7)	0	0.00%
I admire my high school PE teacher. (4)	0	0.00%
I want to help protect the environment. (12)	0	0.00%
I want to be a high school coach. (5)	0	0.00%
I want a job that will help me stay active. (6)	0	0.00%
I want to work in the outdoors. (10)	0	0.00%
I want to learn more about the environment (11)	0	0.00%
I am good at sports. (3)	0	0.00%
I want to teach outdoor adventure activities. (13)	0	0.00%
Other <a href="#">Browse</a>	0	0.00%

Field summary for How Much Adv in HS:		
About how much of your middle school and or high school Physical Education classes consisted of Outdoor Education activities?		
Answer	Count	Percentage
None (1)	23	31.94%
20% (2)	40	55.56%
40% (3)	7	9.72%
60% (4)	2	2.78%
80% (5)	0	0.00%
100% (6)	0	0.00%

No answer	0	0.00%
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Field summary for Other areas prov AE (6):		
Where did the Outdoor Education activities take place at your middle school and/or high school?		
[Physical Education Teacher]		
Answer	Count	Percentage
Not at All (1)	20	27.78%
A Little (2)	23	31.94%
Some (3)	17	23.61%
A Lot (4)	12	16.67%
No answer	0	0.00%

Field summary for Other areas prov AE (1):		
Where did the Outdoor Education activities take place at your middle school and/or high school?		
[Science teacher]		
Answer	Count	Percentage
Not at All (1)	22	30.56%
A Little (2)	33	45.83%
Some (3)	13	18.06%
A Lot (4)	4	5.56%
No answer	0	0.00%

Field summary for Other areas prov AE (2):		
Where did the Outdoor Education activities take place at your middle school and/or high school?		
[Teachers other than Science teacher and Physical Education teacher]		
Answer	Count	Percentage
Not at All (1)	45	62.50%
A Little (2)	20	27.78%
Some (3)	5	6.94%
A Lot (4)	2	2.78%
No answer	0	0.00%

Field summary for Other areas prov AE (3):		
Where did the Outdoor Education activities take place at your middle school and/or high school?		
[After school program]		
Answer	Count	Percentage
Not at All (1)	37	51.39%

A Little (2)	10	13.89%
Some (3)	13	18.06%
A Lot (4)	12	16.67%
No answer	0	0.00%

Field summary for Other areas prov AE (4):		
Where did the Outdoor Education activities take place at your middle school and/or high school?		
[Environmental Education Program]		
Answer	Count	Percentage
Not at All (1)	50	69.44%
A Little (2)	8	11.11%
Some (3)	6	8.33%
A Lot (4)	8	11.11%
No answer	0	0.00%

Field summary for Other areas prov AE (5):		
Where did the Outdoor Education activities take place at your middle school and/or high school?		
[Environmental Education Camp]		
Answer	Count	Percentage
Not at All (1)	50	69.44%
A Little (2)	7	9.72%
Some (3)	4	5.56%
A Lot (4)	11	15.28%
No answer	0	0.00%

Field summary for Age:		
What is your age?		
Answer	Count	Percentage
16 or less (5)	1	1.39%
17-18 (1)	0	0.00%
19-20 (2)	25	34.72%
21-22 (3)	32	44.44%
23 or greater (4)	14	19.44%
No answer	0	0.00%

Field summary for Gender:		
What is your gender?		
Answer	Count	Percentage

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Female (F)	39	54.17%
Male (M)	33	45.83%
No answer	0	0.00%

Field summary for Race:		
What is your race/ethnicity?		
Answer	Count	Percentage
Caucasian (1)	69	95.83%
Asian/Pacific Island (2)	1	1.39%
African American/Black (3)	0	0.00%
Hispanic (4)	1	1.39%
Biracial/Mixed (5)	0	0.00%
Native American (6)	1	1.39%
Other <a href="#">Browse</a>	0	0.00%
No answer	0	0.00%

Field summary for Thanks, other:		
<b>Thanks for taking the time to respond to this survey. If you have any questions, you can contact either myself, Pat Kohlin, at pkohlin@d.umn.edu (218)726-8801 or my advisor, Dr. Ken Gilbertson, at kgilbert@d.umn.edu (218)726-6258. Are there any other comments you wish to add?</b>		
Answer <a href="#">Browse</a>	4	5.56%
No answer	68	94.44%


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